

Holden

JACKAROO

OWNER'S HANDBOOK

UBS SERIES

Owner's Name..... Model Name
Address Reg. No. Eng. No.
Town Odometer Reading
State Postcode
(17 character I.S.O.V.I.N.) Vehicle Identification Number

Vehicle Identification Certificate

Selling
Dealer's
Stamp & Signature

Change of address/ownership

It may be necessary for Isuzu-General Motors Australia Limited (hereinafter I-GM) to contact the owners of I-GM vehicles from time to time. To enable this contact, records are maintained of owner's names and addresses.

So we can keep these records up to date, please complete the form on pages 8-34 or 8-36 and forward to the address shown on the back of this form if:

- a) you change your address
- b) you have purchased this vehicle from a previous owner.

We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction.

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- WARRANTY familiarise yourself with the conditions	Page 5-1
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This handbook applies to *all* 1991 UBS series models. As specifications may vary depending on the model and options included you may find reference to some equipment not installed in your vehicle.

All information, illustrations and specifications in this handbook are based on the latest production information available at the time of printing. Isuzu-General Motors A.L. reserves the right to make changes at any time without notice and without incurring any obligation.

CONTENTS

The first page of each chapter contains a "chapter index".

Chapter 1 **INSTRUMENT PANEL** page 1-0

The first page of this chapter illustrates the instrument panel and identifies the gauges, warning lights and controls. Page reference numbers are listed next to each item.

Chapter 2 **KNOW YOUR VEHICLE** page 2-0

This section covers the other features of your vehicle, not appearing on the instrument panel. Features covered include locks, seat adjustment, seat belts, horn, console, ash trays, mirrors, windows, antenna and the interior light.

Chapter 3 **STARTING, DRIVING & TOWING** page 3-0

Please read chapters 1 and 2 to familiarise yourself with your vehicle before proceeding to this section. This explains the steering lock, how to start your vehicle and when to change gears. There are also some precautions and fuel consumption notes as well as information when loading your vehicle or towing a trailer.

Chapter 4 **ACCIDENTS & EMERGENCIES** page 4-0

The first two pages of this chapter show what to do at the scene of an accident, including giving medical assistance. Following, are some emergency procedures, including wheel changing, starting when the battery is flat, engine overheating, draining water separator (diesel) and bleeding the fuel system (diesel).

CONTENTS

Chapter 5 **WARRANTY** page 5-0

This sets out the terms of your warranty, explains what to do if you need Customer Assistance and lists the Holden Dealers across Australia.

Chapter 6 **WEEKLY MAINTENANCE** page 6-0

As well as taking your vehicle in for a service, there are a few simple checks that the owner must make. These are clearly shown and illustrated. They include checking the oil, water, automatic transmission and brake fluid levels. It also shows how to top up the washer fluid and check your tyres.

The end of the chapter shows how to replace your vehicle's bulbs should the need arise.

Also included are instructions about cleaning your vehicle.

Chapter 7 **SPECIFICATIONS AND EMISSIONS** page 7-0

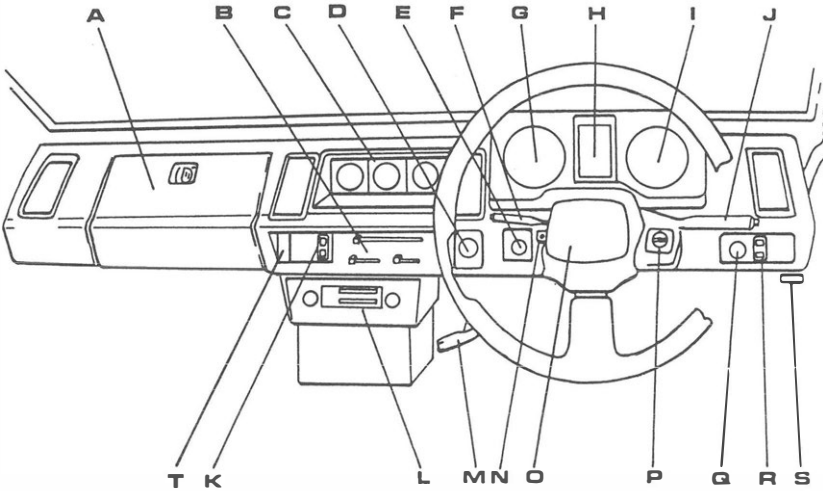
This lists specifications, capacities and general replacement parts, including oil, fuses, etc. Also included is information relating to the emission control features fitted to your vehicle.

Chapter 8 **SERVICE/MAINTENANCE SCHEDULE** page 8-0

This shows when your vehicle requires servicing and what is done at each service. Also included are the coupons that are used when you take your vehicle to a Holden Dealer to be serviced.

INDEX Rear Pages

REFUELLING Rear Cover



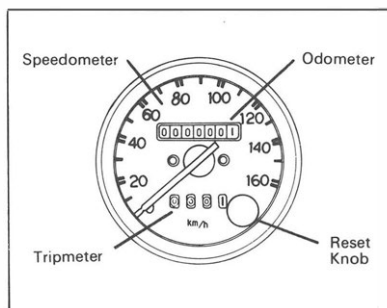
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Speedometer

The speedometer indicates vehicle speed in kilometres per hour.

The odometer (incorporated in the speedometer) records kilometres travelled since the vehicle was built. The black figure on the extreme right indicates 0.1 kilometres.

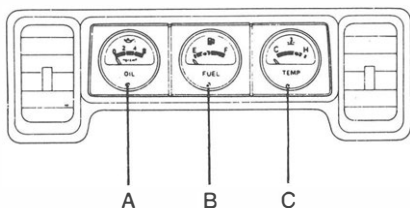
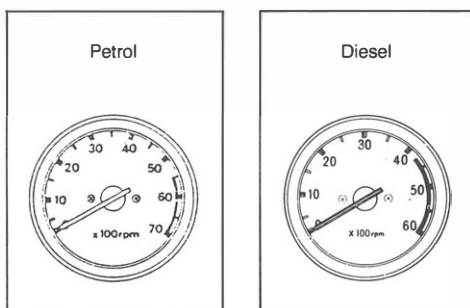
The tripmeter (incorporated in the lower section of the speedometer) records kilometres travelled on a particular trip. Push the knob on the right of the tripmeter to reset the reading to zero.



Tachometer

The tachometer records engine speed in revolutions per minute (r.p.m.).

Continued or sustained operation in the RED zone could cause serious engine damage.



A: Oil Pressure Gauge

The gauge indicates the pressure of oil in the engine. When the gauge needle does not deflect at all or it gives an erratic indication, check the level of oil in the engine crankcase. If the oil level is normal, have the lubricating system checked at your nearest Holden Dealer.

B: Fuel Gauge

The fuel gauge indicates the level of fuel within the fuel tank, when the ignition is switched to ON. 'F' represents full and 'E' represents empty. The maximum capacity of the fuel tank is 83 litres. Refer to information on the inside of the rear cover when refuelling.

C: Temperature Gauge

This gauge indicates the engine coolant temperature. If the needle moves to the extreme right of the gauge, an overheat condition is indicated. Refer page 4-7.

Check Engine Warning (Petrol Only)

Your Jackaroo is fitted with an Electronic Engine Management System.

If the check engine light comes on whilst driving (either intermittently or continuously) then service to the Engine Management system is required. Although the vehicle may still be driveable and does not require towing, see your Holden Dealer as soon as possible for an inspection of the System, as continued driving could affect fuel consumption and engine performance.

**CHECK
ENGINE**

Turn Signal Indicator

The appropriate green arrow will continuously flash while the lever on the right side of the steering column is moved (refer page 1-5) and the ignition key is turned to the "ON" position.

NOTE: Both arrows will flash when the Hazard Warning Button is pulled out (refer page 1-7).



Low Fuel Indicator (where fitted)

This light will come on when the fuel tank is nearly empty. (Approx. 10 Lt.)



4 Wheel Drive Indicator

This light will come on when the transfer gear-shift lever is shifted into 4H or 4L position.

Note that this does not necessarily mean that the vehicle is driving in 4-wheel drive. Refer page 3-8.



Oil Pressure Warning

This symbol will be displayed when the ignition is turned to ON — until the engine is started. If the symbol should glow while the engine is running, it indicates a low oil pressure. Stop the engine immediately and check level of oil in the engine. If the oil level is normal have the lubricating system checked at your nearest Holden Dealer.



Automatic Transmission Warning Light (where fitted)

If this light comes on while you are driving it indicates that the transmission or transfer fluid temperature is high.

You should stop as soon as it is safe to do so, leave the engine idling and the selector lever in P. If the light goes out then you may resume driving. If the light does not go out you should have the transmission checked by a Holden Dealer as soon as possible.

**OIL
TEMP**

NOTE: If the light comes on while you are driving at high speed, ensure the transfer lever is set to 2H and the wheel hubs set to "free".

Fuel Filter Indicator (Diesel only)

Under certain circumstances water may be taken into the fuel tank, and to prevent water from reaching the vital parts of the fuel system, a water separator is installed. When the level of water trapped within the water separator reaches the specified level, the indicator light turns on. If the indicator light turns on and remains on with the engine running, it indicates the need for draining the water separator.

Refer page 4-9.



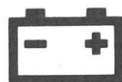
High Beam Indicator

This symbol is displayed when the headlights high beams are in use.



Generator Warning

This symbol will illuminate when the ignition is switched ON — until the engine is started. If the symbol glows while the engine is running a state of 'low charge' is indicated. This should immediately be seen to.



Park Brake Indicator

With the ignition switched to ON and the park brake applied this wording will be displayed. When the park brake is released, the wording will go out.



Brake Warning

This wording will illuminate when the ignition is switched ON — until the engine is started. If the wording should glow while the engine is running it indicates that the brake fluid reservoir is low.

Diesel Only: This light also indicates low vacuum warning.

This should immediately be seen to.



Glow Plug Indicator (Diesel only)

Your diesel engine has a special starting system. Turning the ignition key to ON starts the system and turns on the indicator light.

When the glow plugs have heated the engine enough for it to start, the indicator light will go out. This tells you the engine is ready to be started.



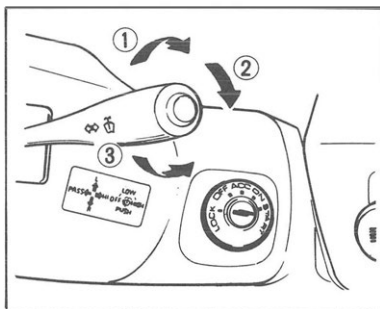
NOTE: Front and rear wipers and washers are only operational when the ignition key is turned to "ON".

Windshield Wiper and Washer

The lever on the right of the steering column has 3 speeds:

1. Low speed
2. High speed
3. Intermittent

Twist the lever clockwise to the first stop for LOW wiper speed and to the second stop for HIGH.



Intermittent (3) is gained by twisting the lever anticlockwise from the OFF position.

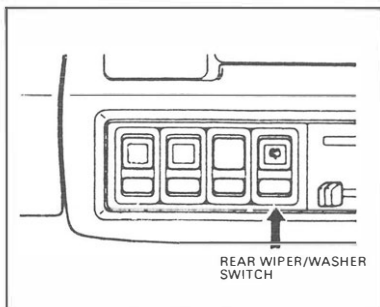
Do not operate the wipers if the windshield is dry. It may scratch the windshield glass. To obtain a spray of water onto the glass, depress the button at the end of the lever as long as required. Refer page 6-11 when topping up the washer fluid.

Rear Wiper & Washer

Depress the top half of the switch to operate the rear wiper. To turn the wiper off again, push the lower half to move the switch back to its mid position.

Do not operate the wiper when the window is dry. It may scratch the glass. Do not operate the wiper if it is caked with snow or frozen as it may damage the wiper system.

To obtain a spray of water onto the rear window, depress and hold the lower half of the switch as long as required.



When the wiper is switched 'ON' the washer can be operated by further depressing the top half of the switch. The washer will cease operating when the switch is released.

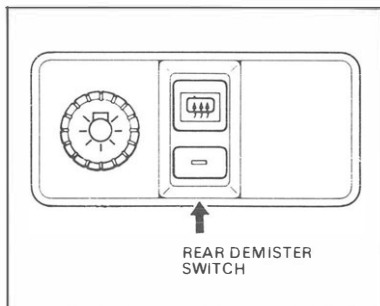
Refer page 6-11 when topping up the rear washer fluid.

Rear Window Demister

When the ignition is turned to ON, depress the top half of the switch to operate the rear window demister. The indicator light turns on when the switch is in use.

Turn off by depressing lower half of the switch when the window becomes clear.

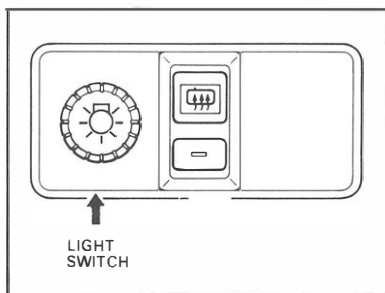
If the switch is left on, the battery will discharge.



Headlights

Pull the knob part way out (Position 1) to operate clearance lights, tail lights, licence plate light and instrument panel lights.

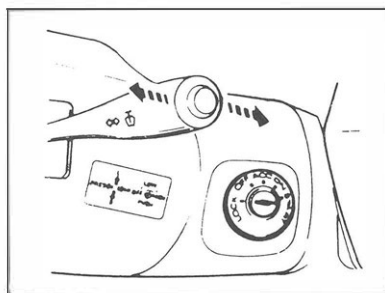
Pull the knob to a definite stop (Position 2) to turn on headlights in addition to the above-mentioned lights.



High/Low Beam

The lever on the right side of the steering column controls high/low beam selection.

To select high beam push the lever forward, away from the steering wheel. Pulling the lever towards you (to its mid position) will change the beam from high to low. When the headlamps are operating on high beam a light located on the instrument panel will glow.



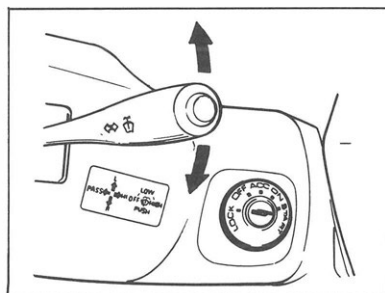
It is also possible to flash the high beam for signalling purposes without operating the light switch by moving the lever backward towards the steering wheel. A light resistance will be felt at the flash position. The lights will remain in high-beam as long as the lever is held.

Turn Signal & Lane Changing

These operate when the ignition switch is turned to ON.

Push the lever up to signal a left turn, and down to signal a right turn. The lever will return to the neutral position when the turn is completed.

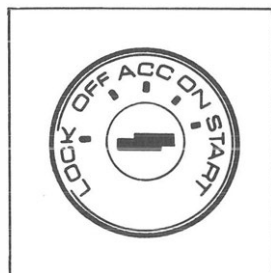
In some turns (such as changing lanes) the steering wheel is not turned far enough to cancel the turn signal. To indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when you release it.



A green arrow on the instrument panel will flash when the lights are in operation. This is accompanied by a clicking sound.

Lock

Normal parking position. Accessories and engine are off. This position locks the ignition and steering when the key is removed. The key can only be removed at this position. To release the steering lock, insert the key into the switch and turn it once to "OFF" or other positions. If you have trouble turning the key to unlock the steering, turn the steering slightly to the right or left while twisting the key clockwise.



OFF

The engine and accessories can be turned off without locking the steering.

ACC

The engine is off but accessories such as the radio still operate.

ON

This is the position at which the engine is ready to start and all electrical systems are active.

Do not leave the switch in the "ON" position for a prolonged period, unless the engine is running, otherwise the battery will discharge.

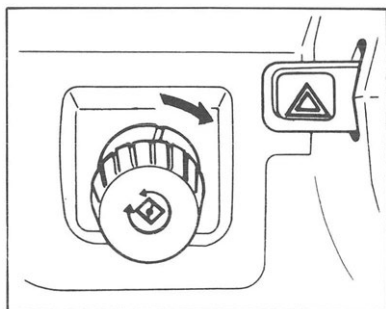
START

This is the position for starting the engine. The key should be released from this position as soon as the engine starts.

CAUTION: Do not turn the engine off while the vehicle is in motion as this renders ineffective any power assisted equipment operated by the engine. Never remove the key while the vehicle is in motion as this will lock the steering of the vehicle.

Diesel Idling Control Knob

Turning the knob clockwise (in direction of arrow) after cold starting of the engine will increase idling speed, thereby facilitating quick normalization of the engine. Always drive with the button returned to home position. (See engine starting procedure).

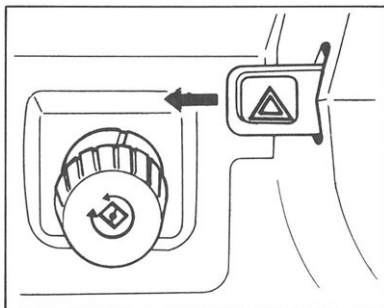


Hazard Warning Flasher

Use the warning flasher to warn other drivers any time your vehicle becomes a traffic hazard, day or night.

Turn on the hazard warning flasher, with the engine ignition off or on, by pulling out the button located on the left side of the steering column.

To cancel the flasher, push the button in.



USE OF THE HAZARD WARNING SYSTEM WHILE THE VEHICLE IS MOVING IS PROHIBITED BY LAW IN SOME STATES.

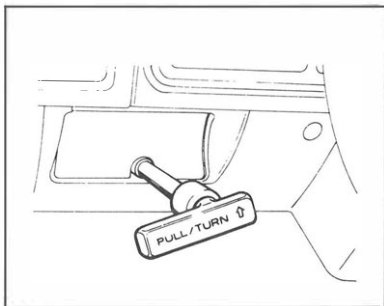
Horn

The horn is activated when the pad in the centre of the steering wheel is pressed, regardless of the ignition key position.

Park Brake Lever

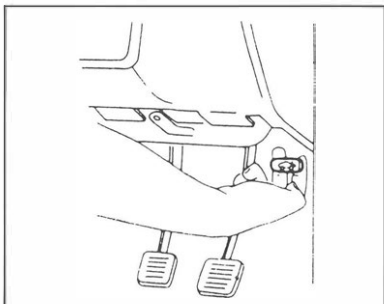
To apply the park brake, pull out the lever. To release, pull out and turn the lever anti-clockwise and push it back into home position.

Never drive with park brake set as this may overheat or otherwise damage park brake mechanism.



Engine Hood Release

To open the engine hood, pull hood lock release lever. This allows the hood to release but is prevented from opening by the safety catch. To open completely, reach in between the bumper and hood and move safety catch to the right. Hold in this position, raise hood and support by inserting rod into the provided slot. For closing return support rod to its resting position and lower hood gradually to be finally dropped under its own weight.



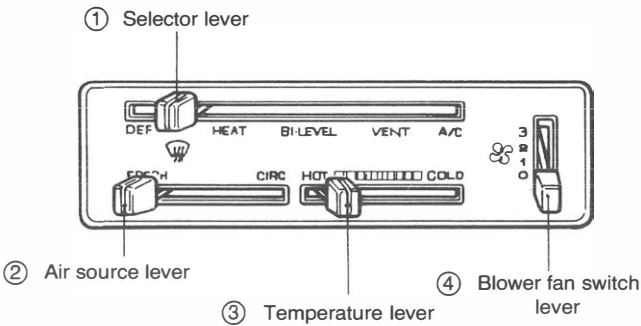
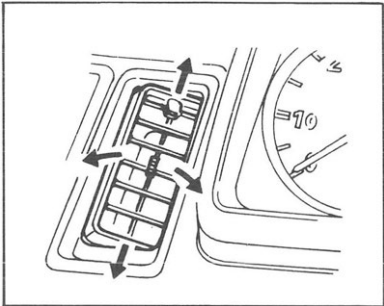
The vehicle features a flow-through ventilation system for your comfort. Under reasonable conditions, it shouldn't be necessary to open the windows at any time. Fresh air (when selected by the Air Source Lever) is drawn into the vehicle through the grille in front of the windshield. Do not allow this to become clogged with leaves or snow.

Outlets

The air can be directed by the Select lever to three different types of outlets: demister, floor and face level.

The four face level outlets, located on the instrument panel, have adjustable vanes which may be swivelled up/down and left/right to allow directional control of air flow.

The floor and demister outlets are fixed, as these direct air to the windshield or feet in the best possible way.



Select Lever

- Def — Air is delivered from the demister outlets with a small amount from the floor outlets.
- Heat — Air is delivered from the floor outlets with a small amount from the demister outlets. This position can be used for most winter driving.
- Bi-level — Cooler air is directed out of the face level outlets and warmer air out of the floor outlets.
- Vent — Air is directed out of the face level outlets.
- A/C — Air conditioning (where fitted) is turned on with the lever in this position. Air is directed out of the face level outlets.

Air Source Lever

- Circ — Vehicle air is recirculated.
- Fresh — Outside air is brought into the vehicle.

Temperature Lever

The temperature lever regulates the temperature of the air entering the passenger compartment in all Select lever positions.

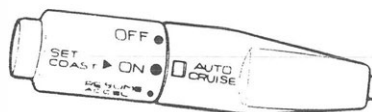
Fan Lever

The fan lever (0-3) provides speed control of the blower fan in all Select lever positions.

Windshield Defrosting and Demisting

To demist or defrost the windshield set the Select lever to "DEF", select air flow and air source required. Demisting or defrosting will be accelerated if higher temperature air is used.

In high humidity conditions however, operate the system for approximately 30 seconds before selecting "DEF" position to purge humid air from the system.



The cruise control is only operational when the ignition key is turned to *on* and the cruise control switch is rotated to the *on* position.

To initially set cruise control, use the accelerator pedal to gain required speed and push (once) the *set/coast* button on the end of the cruise control lever. You can then remove your foot from the accelerator pedal; the vehicle speed will then be maintained by the cruise control.

If you wish for a short burst of speed (passing a car) use the accelerator pedal. When you take your foot off the pedal, the vehicle will slow down to the speed set before passing.

If you wish to increase the cruise control speed you may either:—

- rotate the *on/off* switch to *resume/accel* for less than 1 second. This is known as 'tap up'. Each time you rotate the switch to this position for less than one second the cruise control speed will increase by 1.6 km/h. Tap ups are limited to 10 consecutive times.
- rotate the *on/off* switch to *resume/accel* and hold for more than one second. The cruise control speed will increase until you release the switch.
- use the accelerator pedal to increase vehicle speed, push in the *set/coast* button (for less than one second) then release.

If you wish to decrease the cruise control speed you may either:—

- depress the *set/coast* button for less than one second. This is known as 'tap down'. Each time you depress this button the cruise control speed will decrease by 1.6 km. If you tap down to lower than 40 km per hour the cruise control will be disconnected.
- depress and hold the *set/coast* button. Wait until the vehicle slows to the desired speed, then release the button. If you coast down to lower than 40 km the cruise control will be disconnected.

If, while the vehicle speed is maintained by the cruise control, you:

- (a) depress the brake pedal
- (b) use the accelerator pedal to increase speed to more than 19 km/h above the speed you set with the cruise control
- (c) depress the clutch pedal (manual transmission)
- (d) shift the transmission lever to 'N' (automatic transmission)

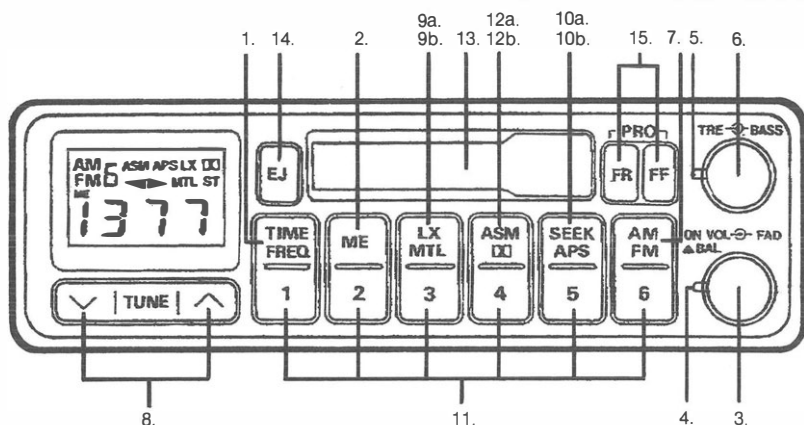
the cruise control will stop controlling the vehicle speed. However, the memory will store the last set speed. To resume this speed, use the accelerator pedal to bring vehicle speed to at least 40 km/h, then rotate the *on/off* switch to *resume/accel* for less than one second. Note: if switch is held for more than one second the memory will be erased and the cruise control will be in the *accel* mode (the speed will increase until you release the switch).

To completely switch off the cruise control you may either:—

- (a) rotate the *on/off* switch to *off*
- (b) depress the *set/coast* button while rotating the *on/off* switch to *resume/accel*
- (c) turn the ignition key to *off*
- (d) use the *set/coast* button to bring cruise control speed below 26 km/h.

Do not use the cruise control when road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic, or on winding, slippery or rough roads.

When going up or down hills (particularly when towing) it is possible for the vehicle to gain or lose speed, even though the cruise control is engaged. If this happens while going up hill merely depress the accelerator pedal to maintain the speed desired. If going down a hill, steep enough to cause the vehicle to gain speed, depress the brake pedal, which will both disengage the cruise control and slow the vehicle down. Rotate the *off/on* switch to *resume/accel* to resume the preset cruise control speed.



1. Time/Frequency selector
2. ME — memory switch
3. On/off switch, left/right speaker balance
4. Fader
5. Bass
6. TRE — treble
7. AM/FM selector (radio)
8. Manual tune (radio)
9.
 - a) LX — local/long distance selector (radio)
 - b) MTL — metal tape (cassette)
10.
 - a) SEEK — tune (radio)
 - b) APS — automatic program selector (cassette)
11. Preset station buttons (radio)
12.
 - a) AMS — automatic station memory (radio)
 - b) Dolby (cassette)
13. Cassette door
14. EJ — eject (cassette)
15. FF & FR — fast forward and fast rewind (cassette)

CLOCK SETTING

The TIME/FREQ button (no 1) alternates the display between time and radio frequency each time the button is pressed.

The clock setting may be adjusted when the time is displayed.

Depress and hold the ME button (no 2) while adjusting the clock. Use the *up* tune arrow to advance the minutes and the *down* tune arrow to advance hours.

Note: If the battery is disconnected the time setting will be lost and will need resetting.

RADIO/SOUND SETTINGS

3. ON/OFF BUTTON, LEFT/RIGHT SPEAKER BALANCE

Rotate the knob to switch the unit ON. Further rotation will gradually increase the volume.

Push and rotate the knob to adjust the balance between both left and both right speakers. The *click* position indicates the centre.

4. FADER

Your Jackaroo is fitted with four speakers, two at the front and two at the rear. Use the tab to adjust the balance between front and rear speakers (fader).

5. BASS

Use the tab to increase or decrease the bass, to your requirements. The *click* position indicates the centre.

6. TREBLE

Rotate the knob to adjust the treble, to your requirements. The *click* position indicates the centre position.

7. AM/FM SELECTOR

Depress this button to change from AM to FM to AM.

8. MANUAL TUNE

Press the right tune button to tune up the band or the left button to tune down the band. If the button is lightly tapped, the radio scans by one step (9 kHz in AM, 0.1 MHz in FM). If the button is kept depressed, the radio keeps scanning (first slowly and then quickly) until the button is released.

9a. LX

Local reception and long distance reception are alternated each time this button is pressed. The LX indicator will be displayed when the weaker, long distance receptions are excluded.

10a. SEEK

When the SEEK button is pressed, the radio will automatically tune up to the next highest station.

11. PRESET BUTTONS

The preset buttons enable you to tune the radio to any of six AM and six FM stations without the need to operate the manual tuning control.

To set:

Tune (using the SEEK or manual TUNING methods) to the desired station. Depress the ME (Memory Enable) button. While the ME indicator on the display window is illuminated (about 5 seconds) depress one of the six preset buttons. After the ME indicator turns off, program the other five buttons in the same way.

12a. ASM (Automatic Station Store Memory)

This allows for an extra 6 AM and 6 FM stations to be stored automatically in another city without losing the permanent presets for the home city's radio stations.

When the ASM button is pressed for more than 2 seconds the radio scans and stores 6 stations. The radio will then automatically start playing the first station it stored. Press the preset buttons if you wish to examine the stored stations.

To alternate between ASM stored stations and your manually stored stations, briefly press (for less than 2 seconds) the ASM button.

If your location again changes and new stations are required, press the ASM button for more than 2 seconds. New stations will be locked in.

- Note** — If there are less than 6 stations in the area ASM system will continue to search until ASM button is pressed again to stop searching.
- It is recommended to select LX in ASM mode.

CASSETTE OPERATION

13. CASSETTE DOOR (SLOT)

Gently insert tape sideways into the slot, with the large side of the tape to the right. Inserting a tape in the slot will automatically start the tape player and override the radio (provided the unit is switched ON).

14. EJ (cassette Eject button)

Press this button to eject a tape. The radio will resume playing.

Note: DO NOT try to eject a tape immediately after insertion — wait a few seconds.

ENSURE that the tape is ejected whenever the unit is switched OFF.

15. FR & FF (cassette Fast Forward and Fast Rewind)

To fast forward a cassette tape, depress the button marked FF. For fast rewind, depress the button marked FR (regardless of tape direction arrows). To release fast forward or fast rewind, depress the nonlocked button.

If the end of the tape is reached during fast forward or rewind, the tape will automatically reverse and begins playing the other side.

Depressing both buttons at the same time will change the side of tape playing.

10b. APS (Automatic Program Selector)

The Automatic Program Selector reads blank spaces in the tape (more than 4 secs long) when the tape is rewinding or forwarding, e.g. will wind the tape to the start of a song (the APS indicator will illuminate when switched on). The APS button must be depressed before depressing the fast wind button.

To stop APS repress the APS button.

12b. DOLBY

Press this button if the tape was recorded using noise reduction, as this reduces tape hiss or background noise (the Dolby noise reduction will illuminate when switched on).

Repress to switch this function off.

9b. MTL (Metal tape)

Press the button for metal or chrome tapes. Repress to switch off for normal tapes. The MTL indicator will illuminate when switched on.

CASSETTE CARE

PRIOR TO USE

The environment in a vehicle is particularly harsh for electronic equipment, subsequently it is important that you take precaution prior to the use of your cassette to ensure its long life.

1. Before inserting a cassette, ensure that there is no excess slack in the tape. If necessary, insert a pencil or similar object and rotate it to reduce the slack. A small amount will not cause malfunction.
2. Ensure that only major manufacturer branded tape is used. The most common cause of cassette malfunction is the use of poor quality tape or tapes over C90 duration. Avoid use of tape longer than C90. Never use inferior tape regardless of its length.
3. Be careful to store tapes out of direct sunlight or the case may warp and cause tape sticking and erratic speed (WOW).

MAINTENANCE

If the fuse blows, don't replace it with a higher rating fuse than original one. If the fuse blows again, carefully check all electrical connections.

The cassette door protects the mechanism from dust and dirt. Never play a dirty or dusty cassette, wipe it off first.

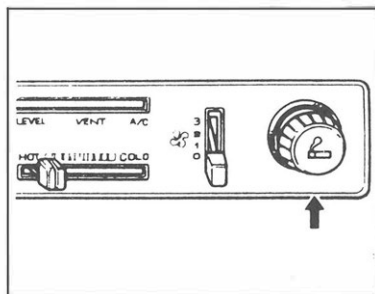
After repeated playing, residue from the tape and dust from surroundings will build up on the tape head and handling surfaces. To assure trouble-free performance, clean the tape head and other tape handling parts using a cotton applicator (swab) moistened in alcohol at least once each month. Heavy use will require removal of the unit for professional cleaning.

This will improve tape handling, frequency response and reduce sound dropouts. To ensure frequency response, demagnetize the tape head after every 50 hours of use. Demagnetization may be accomplished with a demagnetizing tape.

Warning: Cast-metal framed cassettes may not be ejected fully if the unit is mounted at more than 30 degrees.

Cigarette Lighter

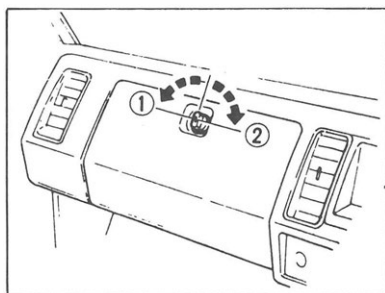
The cigarette lighter is operational with the ignition switch in either the ON or ACC positions. To operate, simply press in the lighter knob. When the element is hot the lighter will automatically pop back to its original position, ready for use.



Glovebox

The glove box is provided on the companion side end of the instrument panel.

To open the compartment lid, turn the lock button clockwise and pull out. To lock it, insert the key into the lock button and turn it counter-clockwise.



- ① Lock
- ② Unlock

Know Your Vehicle

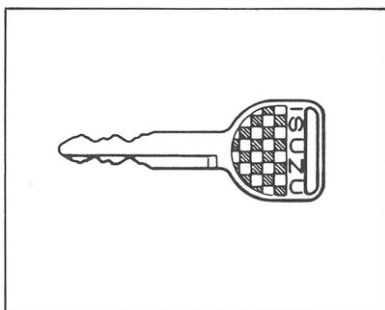
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- 2-1 - Keys and Locks
- 2-2 - Side Door Locks
- 2-3 - Back door Locks
- 2-4 - Front Seat Adjustment
- 2-5 - Folding Rear Seat
- 2-6 - Seat Belts
- 2-9 - Console, including Clock
- 2-10 - Mirrors
- 2-10 - Windows
- 2-11 - Ash trays
- 2-11 - Interior Light
- 2-11 - Antenna

Keys

The code number of each key is stamped on the key. Record the key numbers and keep the numbers in a safe place such as your wallet. **NOT IN THE VEHICLE.**

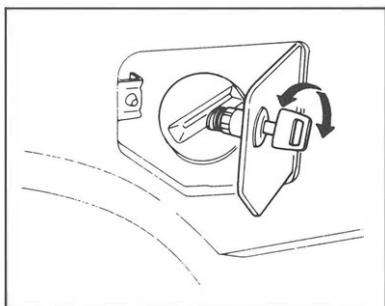
In the event the original keys are lost; duplicates can be made by your dealer using the key code information.



Fuel Tank Filler Door

The vehicle is equipped with a lockable fuel filler door which can be unlocked or locked with the ignition key.

After refuelling, check to be sure the fuel filler door is locked up properly.



Glove box Lock

Refer page 1-17.

Manual

When leaving the vehicle —

- Side door locks can be locked or unlocked with the ignition key. To open doors, unlock with key then lift the door handle.
- To lock doors without using the key, push down the lock button (inside the vehicle) then close the door while holding up the door handle.

When remaining inside the vehicle —

- Push the lock button down to lock the door, pull up to unlock.

Electric (where fitted)

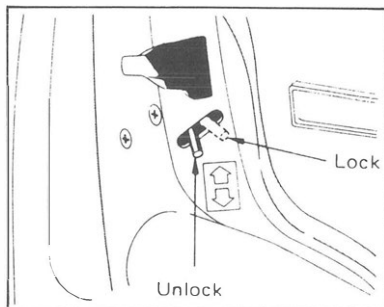
All doors will unlock and lock simultaneously when the driver's door is locked or unlocked either with the inside lock button or the key from outside.

Door locks may be operated manually in the conventional manner.

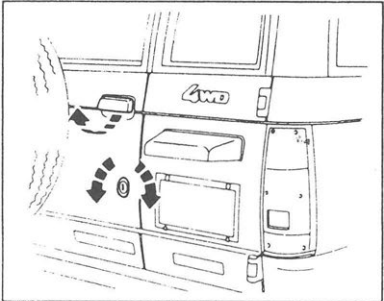
'Child Proof' (where fitted)

This added safety feature is built into both rear and side doors. To operate it push the lever **down** as far as it will go and close the door. The door cannot now be opened from inside regardless of the lock button position. To disengage, open the door from outside and push the lever **up** as far as it will go.

CAUTION: For safety, you should check that the lock is operating correctly, after setting, by attempting to open the door from the inside.

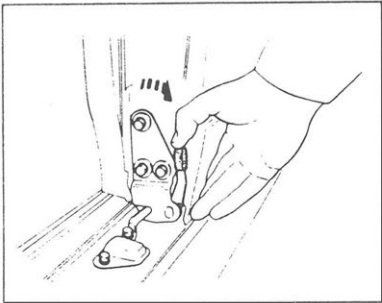


The left back door can be locked or unlocked with the ignition key. The left back door can be opened by lifting and pulling the outside door handle.

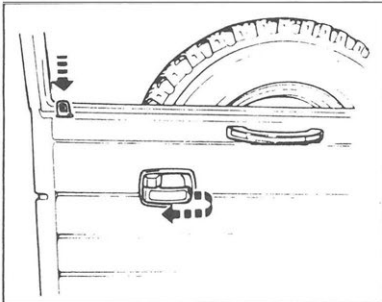


When the left, back door is open, the right back door can be opened by turning and pulling the lock at the bottom edge of the door.

Make sure to lock the right back door before closing the left back door.



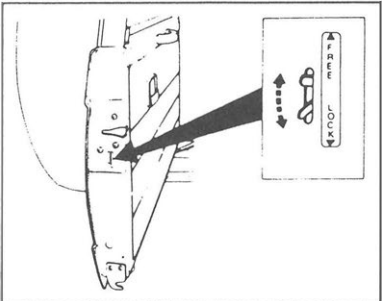
The left, back door can be opened from inside by pulling the back door inner handle. The back door can be locked from inside by pushing down the door lock knob.



‘Child Proof’ (where fitted)

This added safety feature is built into the back door. To operate it push the lever down as far as it will go and close the door. The door cannot now be opened from inside regardless of the lock button position. To disengage, open the door from outside and push the lever up as far as it will go.

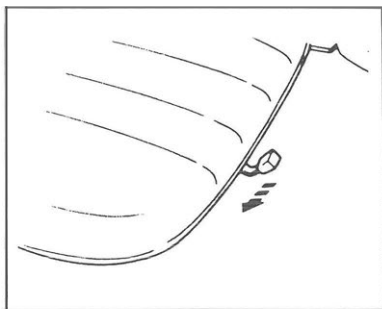
CAUTION: For safety, you should check that the lock is operating correctly, after setting, by attempting to open the door from the inside.



Forward/Rearward

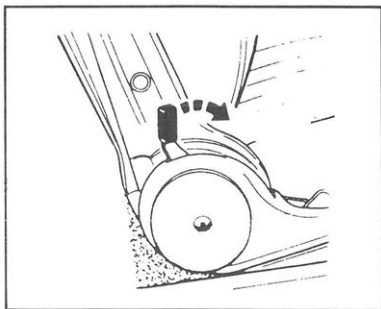
Push sideways on the lever, located at the front lower part of the seat, to release the seat adjuster lock so that the seat can be moved forward or rearward as desired. After adjusting the seat position, try to move the seat forward and backward to be sure the seat adjusters have been latched.

Do not adjust the seat while the vehicle is moving.



Back Inclination (where fitted)

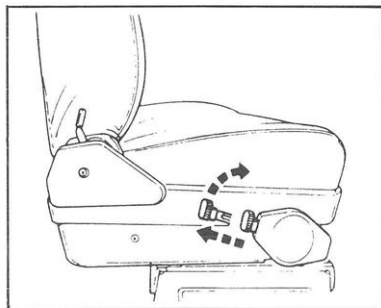
Front seat back inclination can be adjusted by raising lever on door side of seat.



Seat height control (where fitted)

To control height of the driver's seat, pull out the lever and then turn it.

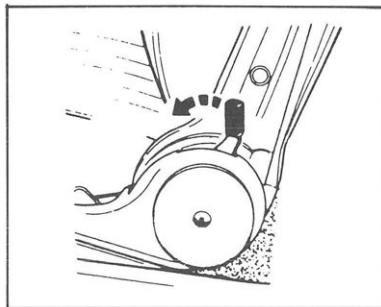
When you release the lever, it returns to its home position automatically and the system is locked.



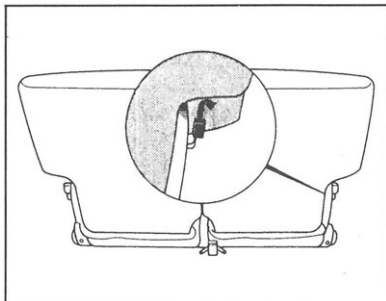
Passenger Seat

(2 door models only)

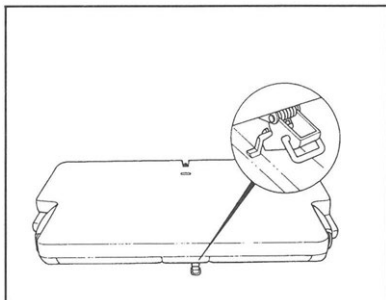
On the passenger side, the seatback assembly slides all the way forward as the reclining lever is pulled, making it easier for rear seat occupants to enter or exit.



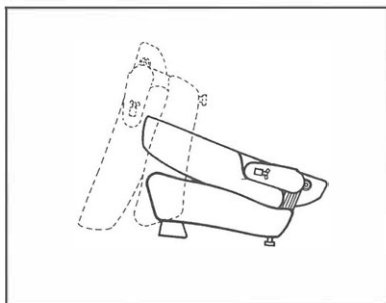
1. Release the lock levers at either side of the backrest. Release the levers at the same time.



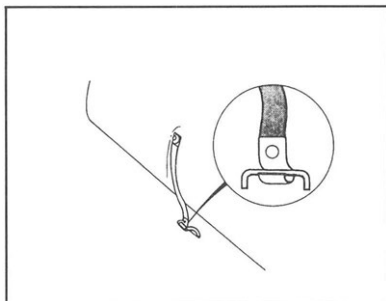
2. Fold the back rest forward.



3. Release the lock at the back of the seat.



4. Lift the entire seat and push it forward.



5. Push the seat lock into the floor mounted hook.

Infant and Child Restraint

CHILDREN SHOULD BE RESTRAINED AT ALL TIMES WHEN RIDING IN A MOTOR VEHICLE.

In some states it is Law that children must be belted in, whenever they are travelling in a vehicle in which seat belts are installed. CHILDREN ABLE TO SIT UP should be restrained with the regular seat belt or an approved child restraint.

Where children are restrained with the regular belt and it is desired to raise their seating position this is to be done only by means of a support which is retained by the belt. **NEVER USE A LOOSE CUSHION AS THIS COULD ALLOW SERIOUS INJURY IN THE CASE OF VEHICLE COLLISION.**

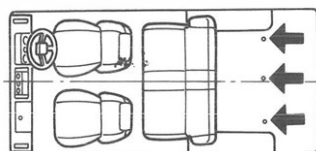
Child restraint anchorages

Your vehicle is fitted with anchorage points for child restraints. Anchorage points are located in the floor behind rear seats. Install child restraints using a 10 mm spacer between the floor and the anchor fitting with a 5/16" -18 U.N.C. (course thread) x 30mm long bolt.

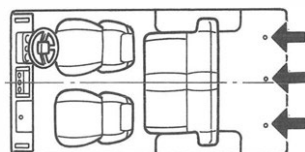
WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

Only approved child restraint harnesses should be used on anchorage points. See your Holden Dealer for advice about the various types of approved child restraints available.

INFANTS UNABLE TO SIT BY THEMSELVES should be carried in an approved child seat restraint (capsule). Check with your local Infant Welfare Centre for availability.



4 door model



2 door model

AUSTRALIAN DESIGN RULES: WARNINGS

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of webbing with polishes, oils and chemicals, and particularly battery acid.

Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The positioning of the tongue restrictor must never interfere with or stop the belt from fully retracting.

Retractor Belts

To put on a retractor seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a “click”. After fastening, settle the belt by running your hand under the belt starting at the hip, go across to the buckle, then up under the sash. Any extra belt length will retract automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and are fitting firmly.

The emergency-locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

To release the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

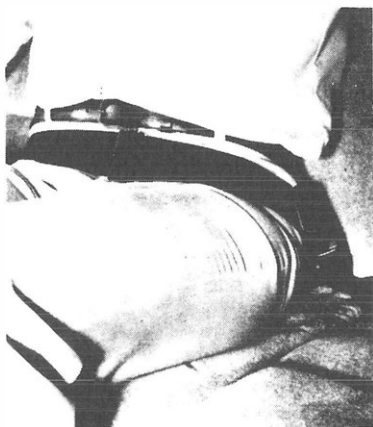


Non-Retractor Belts

To adjust: Settle yourself comfortably. Bring the tongue adjuster across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a “click”. Make sure the belt is fitting firmly across the lower hip area and not across your waist.

To shorten: Tilt the tongue adjuster and pull the belt through the belt adjuster.

To lengthen: Tilt the tongue adjuster and pull the belt from just below the finger grip bar.

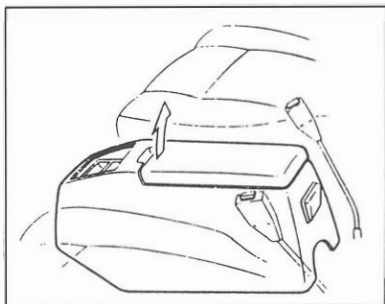


Maintenance of Seat Belts

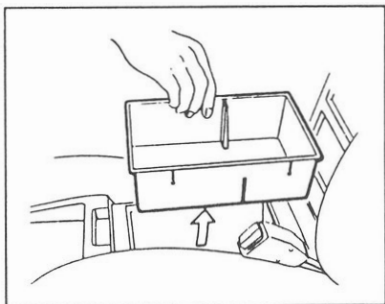
- Check seat belts regularly. Replace the belts if they become frayed or damaged. The buckle and retractor mechanism operations should also be checked. Your Holden Dealer will do these things as part of the schedule maintenance plan.
- Seat belts must be replaced if they have been in use during a severe impact — even if there is no obvious damage.
- Clean belts only with a solution of mild soap and lukewarm water. Never use bleach.

Console

To open, pull up the tip end of the lid.



The intermediate lid can be pulled out as shown.



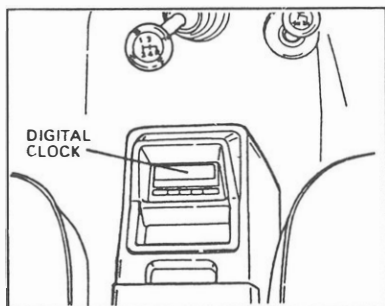
Clock (where fitted)

Time is displayed when the ignition is turned to ON.

“M”: Minute indication is advanced rapidly while this button is pushed.

“H”: Hour indication is advanced rapidly while this button is pushed.

“SET”: Minute indication is reset to “00” when this button is pushed.



If the reset button is pushed when the display is 1:01 - 1:29, the reset hour will be 1:00; when the display is 1:30 - 1:59, the reset hour will be 2:00.

The clock does not display seconds, but starts from zero seconds when the “SET” button is pushed.

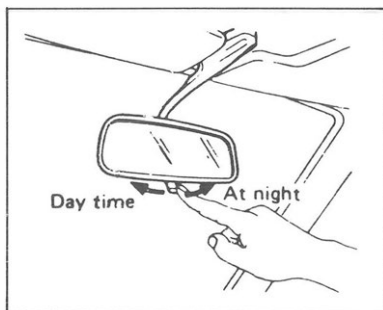
Inside rearview mirror

To adjust, push the mirror right or left, and up and down.

Anti-Glare Type (where fitted)

Where the anti-glare mirror is fitted, a control lever on the lower edge of the mirror enables an anti-glare reflector to be used during night driving. This reduces headlamp glare from following vehicles.

During normal daylight operation, the lever should be set forward. To reduce glare at night, move the lever backwards.



Outside rearview mirrors

Adjust the outside rearview mirrors so you can just see the side of your vehicle in the side of the mirror. This helps you determine your relation to objects seen in the mirror. When selecting the most suitable angle for the mirrors ensure that the driver's head is in the normal position for driving then adjust the mirror angle to suit.

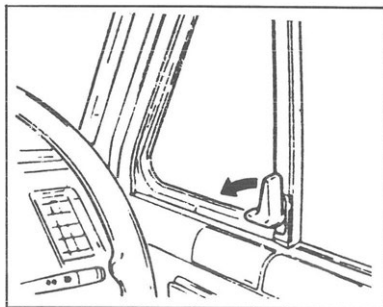
Window Regulator handle

Turn the window regulator handle to raise or lower the door window.

Front door vent windows

To open the door vent windows, turn the handle forward and push the window outward. To close the door vent windows, pull the window inward and turn the handle until it locks against the window frame.

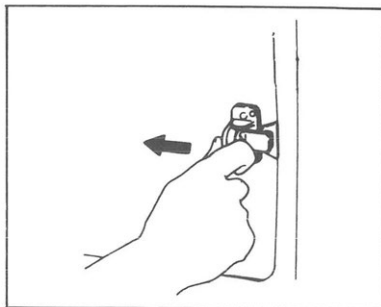
Remember to lock vent windows when leaving the vehicle unattended.



Rear side windows

(2 door model only)

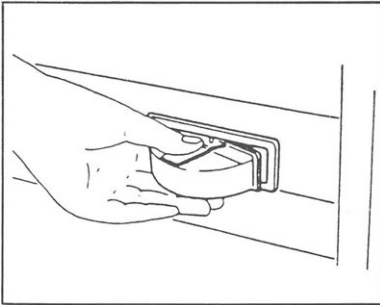
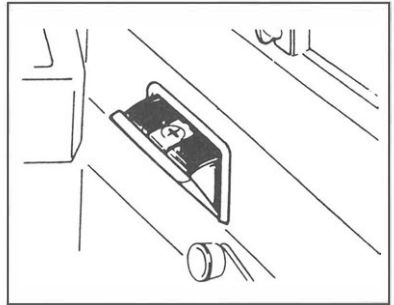
Push open the windows with the window lock depressed. The windows are automatically locked when completely closed.



Ash trays

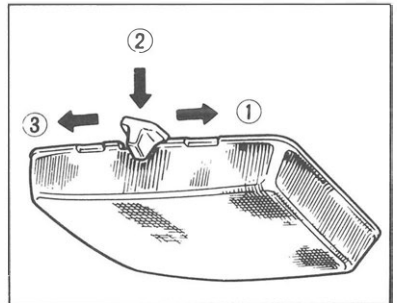
To remove hinged type ash trays, depress entire tray while pulling out.

To remove swivel type ash trays, depress the retainer spring and pull out the tray.



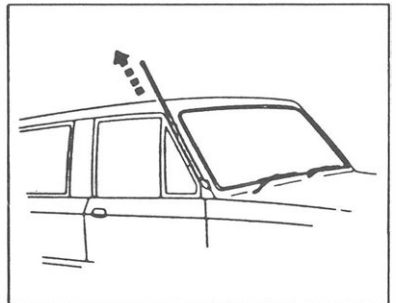
Dome light

- ① "OFF" The light remains out.
- ② "DOOR" The light turns on when the door is opened.
- ③ "ON" The light turns on regardless of the door position.



Antenna

Extend the antenna for maximum distance reception.



Starting, Driving & Towing

Page

- 3-1 — Safety
- 3-2 — Petrol Engine Starting
- 3-3 — Diesel Engine Starting
- 3-4 — Driving Precautions
- 3-5 — Manual Transmission
- 3-6 — Automatic Transmission
- 3-8 — 4 Wheel Drive
- 3-10 — Towing & Loading
- 3-12 — Running In
- 3-12 — Reducing Fuel Consumption

Exhaust Gas Warning

(Carbon Monoxide Poisoning)

Exhaust gases contain carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

You could inhale the gases if the exhaust system on your vehicle is faulty.

To protect against exhaust gas entry into the interior of the vehicle we recommend that the exhaust system and body be thoroughly inspected:

- each time the vehicle is serviced;
- whenever a change is noticed in the sound of the exhaust system; or
- whenever the exhaust system, underbody or rear of the vehicle is damaged.

Take the vehicle to your Holden Dealer if you think your vehicle needs inspecting for any of the above reasons.

DO NOT SIT IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING AND DON'T LEAVE THE CHILDREN OR YOUR PETS IN THE VEHICLE EITHER.

DO NOT RUN THE ENGINE IN AN ENCLOSED AREA SUCH AS THE GARAGE, ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.

Driving with the rear door open is not recommended. If you must travel with the rear door open, close all windows, select "fresh air" with the heater controls, turn the fan to the maximum setting and do not exceed 50 km/h unless necessary.

Before Entering the Vehicle

1. Check that windows, mirrors and lights are clean.
2. Check tyre inflation.
3. If you intend to reverse, check that the area behind your vehicle is clear.

Before Driving Off

1. Be sure that all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that the warning indicators light up when you turn the key to start the engine.

Parking

1. Apply the parking brake.
2. Place manual transmissions in Reverse gear and automatic transmissions in Park.
3. Turn ignition key to lock and remove key.
4. Shut all windows and lock all doors.

CAUTION: Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.

1. Apply the parking brake firmly and release only after you have started the engine and ready to drive off.
2. **Manual**
Depress the clutch pedal and shift the gear lever to Neutral Position. The clutch pedal can now be released.
Automatic (where fitted)
Move the shift lever to 'P' (Park) or 'N' (Neutral) position. The engine will not start if it is in any other position.
3. Start the engine as outlined below **(with your foot off the accelerator)**.
For cold or hot starting the procedure is the same. Simply turn the key to START position and release when the engine starts. You do **not** have to depress the accelerator pedal prior to or during cranking.
NOTICE: You should not subject the engine to high load conditions such as full throttle acceleration or high speeds until it has completely warmed up.

Flooded Engine

Cranking the engine for a lengthy period without it starting could result in there being too much fuel in the engine.

If this occurs, press the accelerator down to the floor and hold it there while holding the key in the START position. When the engine starts, allow the accelerator pedal to come up slowly.

Glow plug indicator light

Your diesel engine has a special starting system. Small heating elements, called "glow plugs" warm part of the engine for improved starting.

Turning the starter key to the "ON" position starts the system and turns on the indicator light. This indicator light is located on the instrument panel, refer page 1-4.

When the glow plugs have heated the engine enough for it to start, the indicator light will go out - the engine is now ready to be started.

Note that waiting time depends on the engine temperature, the light may stay on for a short time or go out right away.

If the light fails to come on, see your Holden Dealer.

Starting

Turn the starter key to the "ON" position and check to see that the glow plug indicator light has turned on. As soon as the glow indicator light has gone off, fully depress the accelerator pedal once and release. Depress the clutch pedal.

For quick cold engine warm up, depress the upper section of the warm up switch, located to the left of the heater controls. The quick warm up system will cut out automatically when the engine has warmed up. The indicator light will remain on and should be turned off by depressing the lower section of the switch after the engine is warmed up, as indicated by the coolant temperature gauge.

Crank the engine by turning the starter key to the "START" position. Release the key when the engine has started. It will return to the "ON" position.

If necessary to achieve a smooth idle, turn the idling control button clockwise. Remember to turn it fully anti-clockwise when the engine has warmed up (as indicated by the coolant temperature gauge).

NOTE: Do not keep cranking the engine for more than 30 seconds if the engine fails to start. Wait for 30 seconds before trying again.

Turbo Operating Precaution

ENGINE STARTING Do not operate the engine above idle before normal engine oil pressure has been established (such as applying full throttle immediately upon initial startup). This causes the turbocharger to operate at excessive speed before the bearings receive adequate lubrication.

Operation of the turbocharger for a period as short as 5 seconds without sufficient oil can cause bearing failure.

ENGINE STOPPING Do not shut off the engine immediately after it has been run at high speeds or under heavy loads. The engine should first be allowed to idle, as shown in the chart.

Failure to do this will cut off oil supply to the turbocharger bearings.

Driving condition	Idling time
High-speed driving about 80 km/h	30 seconds
High speed driving about 100 km/h	1 minute
Steep mountain slope or continued driving above 100 km/h	2 minutes

Brakes

- Power assisted brakes, which are fitted to your vehicle, utilise vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running. Never coast with the engine switched off.
- A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.
- Driving through water may affect performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.

Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material under the pedal which causes interference with normal pedal movement.

Also, your seat should be positioned so that you can reach the brake pedal satisfactorily under all braking conditions.

Steering

- Power assisted steering, which is fitted to your vehicle, has been designed to reduce steering effort. It uses hydraulic pressure to lighten steering loads and is designed so that "road feel" is retained. Care should be taken not to hold a turning force on the steering wheel when stationary (i.e. when waiting before turning a corner, etc.) as this creates unnecessary, high operating pressures within the system.
- If the power steering is rendered ineffective because the engine has stalled, the drive belt broken or if the pump reservoir is empty of fluid, the vehicle can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

- Wherever possible, loose articles should be firmly secured in the rear luggage area.

Water crossing

When driving across a shallow river or deep puddle, extreme care must be exercised or water may enter the engine air intake causing serious engine damage.

To prevent water being forced through the grille into the engine compartment, tie a sheet of canvas or some other suitable material to the underside of the front bumper bar and wrap it over the bumper, grille and top of the bonnet with a tie back to the door mirrors.

Remember that steady speed and constant traction are necessary for successful water crossing.

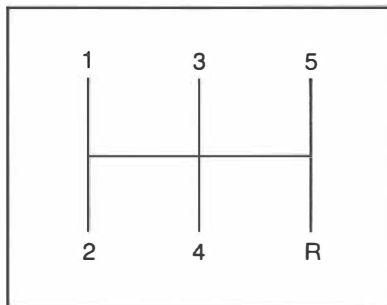
When the crossing is completed, remove the canvas.

After crossing deep water, check to ensure that no water has entered and mixed with the oil in the following components:

- Engine
- Transmission
- Front and Rear Differentials

This system has 5 fully synchronised forward gears and a non synchronised reverse gear. The shift pattern illustrated, is also found on the end of the gear shift lever.

Never attempt to engage "Reverse" gear until the vehicle has completely stopped. A slight pause between depressing the clutch pedal and moving into "Reverse" gear is desirable to allow all the rotating components to stop and avoid gear crashing.



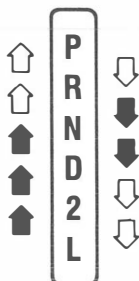
Operating Notes

- When shifting from one gear to another, be sure to depress the clutch pedal fully to avoid clashing and possibly chipping the transmission gears.
- Shift the gears with a moderate effort to allow time for the transmission synchronizers to work properly.
- Whenever "Reverse" is selected with the ignition on, the back-up lights will operate.
- Do not drive with your foot resting on the clutch pedal as damage to the clutch may result.
- When stopped on an incline do not hold the vehicle by slipping the clutch. Use the foot brake or parking brake.
- When climbing steep grades, change down to a lower gear before the engine starts to labour. To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not overspeed the engine when shifting down to the next lowest gear.

Depress the square button on the right side of the T-bar handle when shifting to R or P and when shifting from D to 2 to L as indicated by the arrow. 

You may shift without depressing the button: into any positions indicated by the arrow. 

NOTE: The engine will not start unless the selector is in P (Park) or N (Neutral).

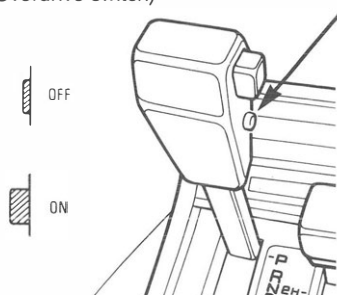


4th Gear (Overdrive) Switch

The small, round button on the right side of the T-bar lever is the 4th gear switch. When the switch is out and 'D' (drive) is selected, the transmission will act as a '4 speed' — changing from low gear through to 4th gear, as required by road speed and acceleration.

The transmission, however, will not change to 4th gear (even with the button out) until the engine has reached normal operating temperature.

(Overdrive switch)



If engine braking is needed when going downhill in 'D' (drive) or the transmission is repeatedly up and downshifting between 3rd and 4th gears when climbing gentle slopes it is suggested that 4th gear be switched off. To reduce fuel consumption and noise, select overdrive again when these road conditions do not apply. The 'OFF' light on the panel in front of the T-bar lever is designed to remind you when 4th gear is switched off.

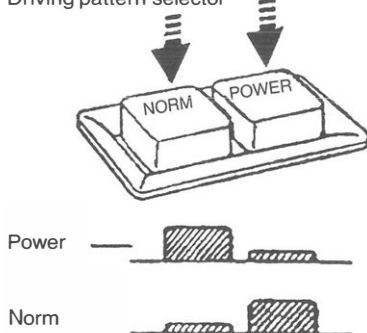
Power/Norm Drive

The two buttons marked 'POWER' and 'NORM' control the two shift patterns available with your automatic transmission.

When the 'NORM' button is pressed in (or when neither button is pressed in) the NORMAL PATTERN is selected. This, together with 4th gear switched on is the most effective pattern for normal or freeway driving and allows for maximum fuel efficiency.

The POWER PATTERN delays the point at which the transmission would normally shift to a higher gear. This pattern is recommended when overtaking and gives acceleration, especially in hilly areas or when towing.

Driving pattern selector



The 'NORM DRIVE' or 'POWER DRIVE' lights on the panel in front of the T-bar lever indicate which pattern is selected.

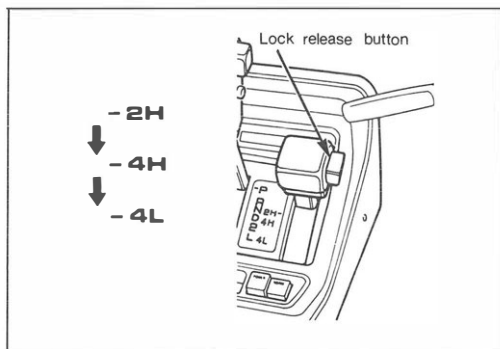
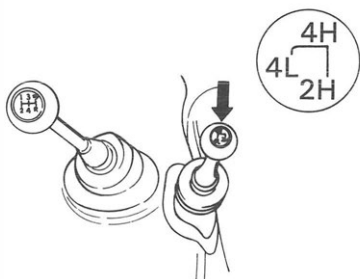
P — (PARK)	This stops the rear wheels from turning and should be selected (together with the park brake) when leaving the vehicle. Never select P until your vehicle is fully stopped.
R — (REVERSE)	Never select R until your vehicle is fully stopped. Reversing lights will operate when R is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before proceeding forward again.
N — (NEUTRAL)	This is the out-of-gear position. You may then restart a stalled engine while the vehicle is still moving.
D — (DRIVE)	This is the normal forward driving position and allows the transmission to choose the appropriate gear for the load and driving conditions.
2 — (SECOND)	Use this position when going down a moderate gradient where you want to slow down a little without using the service brakes. Shift back into the "D" position to return to normal driving.
L — (LOW)	Use this position when strong braking effect is needed on a steep gradient. Shift back to "D" range so that the transmission will again upshift into direct drive.

- Don't rev the engine with the brakes on in either L, 2, D or R. This will overheat the transmission.
- Don't rev the engine to hold the car on a slope. Use the brakes.
- Don't ever coast the vehicle in N — this lessens your control and the engine braking power.

Refer page 6-5 when checking automatic transmission fluid level.

4 wheel drive/2 wheel drive selection is made by both transfer lever position (from inside the vehicle) and front (left and right) wheel hub position. That means that the vehicle will not operate in the 4 wheel range until the wheel hubs have been locked — even if the transfer lever is in the 4L or 4H position.

Transfer lever



2H: Rear wheel drive, high range

4H: Four wheel drive, high range

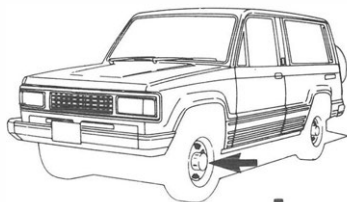
4L: Four wheel drive, low range

When the transfer lever is in 4H or 4L mode the indicator light on the instrument panel will glow.

To select 4 wheel drive

1. Stop the vehicle.
2. Shift the transfer lever to 4H or 4L.
3. Set both left and right wheel hubs to the "LOCK" position.

If front hubs are locked, 4WD can be selected at any speed up to 80 km/h.



To select 2 wheel drive

1. Stop the vehicle.
2. Shift the transfer lever to 2H.
3. Set both left and right front wheel hubs to the "FREE" position.

2WD can be selected at any speed.

Cautions

- Never drive the vehicle with the hubs in the “FREE” position and the transfer lever in 4H or 4L.
- Never LOCK one hub only — both sides must be either in the locked or freed position.
- Vehicle should never be operated on hard surfaces or sealed roads for a distance above ¼ kilometre in 4L or 4H with the hubs in the “LOCK” position.

Running-In

To properly run-in front wheel drive axle components, drive the vehicle for the initial 300 km with the transfer lever in 2H position and the wheel hubs in the “LOCK” position.

To ensure proper lubrication of the front wheel drive axle components, the vehicle should be driven for a minimum of 20 km every month with the wheel hubs in the “LOCK” position.

However, to reduce fuel consumption under normal driving conditions, the wheel hubs should be in the ‘FREE’ position and the transfer lever in the 2H position.

Overloading is a safety hazard and could also shorten the life of your Jackaroo or its parts.

Kerb Mass

The kerb mass shown below is the weight of a standard, unloaded vehicle with 10 litres of fuel in the fuel tank.

Petrol, long wheel base — 1630 kg

Petrol, short wheel base — 1540 kg

Diesel — 1720 kg

G.V.M.

Gross Vehicle Mass (G.V.M.) is the total weight that a vehicle is allowed to weigh when fully loaded. This must include luggage, passengers, a full tank of fuel and towbar ball load. The maximum allowable G.V.M. for your Jackaroo is 2150 kgs.

Towbar Ball Load

Towbar Ball Load is the weight on the towbar ball when the packed trailer is hitched.

Ideally, the ball load should be 10% of the packed trailer weight. This can be adjusted by correctly packing the contents of the trailer.

If the ball load is too light or too heavy, the steering and handling of the vehicle will be greatly impaired.

G.C.M.

G.C.M., or Gross Combined Mass, is the maximum allowable combined weight of a vehicle (with passengers, luggage and a full tank of fuel) plus the weight of a packed trailer.

The maximum allowable G.C.M. for your Jackaroo is 3100 kgs, provided your trailer is fitted with braking which is initiated by the driver (NOT over-run operated trailer brakes).

If the trailer is not fitted with driver initiated braking, then the G.C.M. is 2650 kgs.

Front & Rear Axle Loads

The maximum allowable front axle load for your Jackaroo is 1150 kgs. The maximum allowable rear axle load for your Jackaroo is 1600 kgs. However, the combination of the front and rear axle load should never exceed the maximum G.V.M. (2150 kgs).

Remember to take the towbar ball load into account when determining the rear axle load.

Towing Capacity

You may tow a loaded caravan or trailer weighing up to 1400 kg, provided the G.C.M. is not exceeded. This means that if your Jackaroo is heavily loaded you would *not* be able to tow 1400 kg because the combined weight of the trailer and Jackaroo would exceed the G.C.M. set out above.

Safe Towing Tips

- Your Jackaroo will handle differently with a towed load. It's a good idea to make a proper familiarisation run.
- Have your Jackaroo correctly maintained and serviced.
- You should have an extended-arm mirror on both sides of your vehicle.
- Headlights may need re-aiming after the loaded trailer has been hitched.
- Use a lower gear, rather than your brakes when descending steep hills.
- Avoid sudden steering manoeuvres at speed to minimise trailer weight affecting vehicle and trailer control.

Towing Precautions

1. Do not use axle-mounted hitches.
2. Trailer brakes must meet State Law requirements where you will be driving. Some States specify that the maximum load to be towed must not exceed the vehicle weight.
3. It is permissible to tap into the brake system with a unit not more than 0.21cc of fluid displacement during the operation of the brakes.
4. Ensure that the towbar does not obscure the rear licence plate, as this may violate State Law. If necessary, the towbar tongue may need to be removed when not required for towing.
5. Whenever a towbar is removed be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
6. Correctly rated towbar and tongue package must be used.
7. If your Jackaroo has an automatic transmission then the fluid in the transmission will have to be changed more often when towing (refer page 8-2).

Running-In Period

It is best to drive your new Jackaroo for 1500 kilometres before towing a load. If you must tow before this do not exceed 80 km/h on good roads. No heavy, off-road towing should be attempted before 1500 kilometres.

Roof Racks

It must be understood that roof rack loads alter the handling characteristics of a vehicle due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering manoeuvres. The load of 60 kgs is the load limit on rough roads and off-road. Loads up to 120 kgs are permissible on good roads.

Remember to take the roof rack load into account when determining G.V.M. and G.C.M.

Modifications to your vehicle

Any modification to your vehicle could affect its performance, safety, or durability and possibly invalidate the warranty.

Handling Characteristics

Your four-wheel drive vehicle does not handle like an ordinary vehicle. It has a high center of gravity for off-road use. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or an accident.

“Running-In”

These days, there's no need to follow the formal running-in schedule. However, by observing a few simple precautions during the first few hundred kilometres of driving you will greatly assist your vehicle's future performance and economy.

For the first 500 kilometres, don't exceed 90 km/h. Up to 1,500 kilometres avoid driving at any one speed — either slow or fast — for any length of time. Therefore avoid using the cruise control (if fitted) while 'running-in'.

Include some higher speeds during this period. Always drive at moderate speed until the engine has completely warmed up.

For the first 500 kilometres heavy braking should be avoided, except in an emergency, since brake misuse during this period could impair future braking efficiency.

It is best to drive your new Jackaroo for 1500 kilometres before towing a load. If you must tow before this do not exceed 80 km/h on good roads. No heavy off-road towing should be attempted before 1500 km.

Also refer page 3-9 for running-in front wheel drive axle components.

How to Reduce Fuel Consumption

(1) VEHICLE MAINTENANCE

Maintain your vehicle in peak mechanical condition by having it serviced regularly in accordance with the I-GM Maintenance Schedules. This will ensure items such as engine timing, spark plugs, air cleaner, engine idle etc. are maintained for least fuel consumption.

(2) TYRE PRESSURES

Keep the tyres at the recommended pressures. Under-inflated tyres create extra rolling resistance which contributes to increased fuel consumption. (Refer page 6-8).

(3) WHEEL ALIGNMENT

Maintain correct frontwheel alignment. Incorrect alignment makes the front wheels drag and increases fuel consumption.

(4) WARM UPS AND EXCESSIVE IDLING

- Avoid long engine warm ups. They are unnecessary and waste fuel. An engine takes approximately five minutes to reach its efficient operating temperature and it does this most effectively by driving on the road.
- You should also avoid excessive engine idling. If you have to wait for more than a couple of minutes turn off the engine to conserve fuel.

(5) ACCELERATING, DRIVING AND BRAKING

- Accelerate gently — avoid rapid starts, sudden bursts of speed and full throttle accelerations — they're certain fuel wasters.
- Drive the vehicle at steady speeds where possible (after run-in). It is desirable to achieve top gear operation as soon as possible, but under no circumstances should you force the engine to labour in top gear.

NOTICE: “Riding the brake” by resting your foot on the brake pedal when you do not intend to brake can cause overheated brakes. This can wear out the brake linings and pads faster, damage the brakes and waste fuel.

Accidents & Emergencies

Page

- 4-1 — What to do at the scene of the accident
- 4-2 — Medical Assistance
- 4-3 — Wheel Changing
- 4-5 — Flat Battery
- 4-7 — Engine Overheating
- 4-8 — Towing a Vehicle
- 4-9 — Diesel — Draining Water Separator
- 4-10 — Diesel — Bleeding Fuel System

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation, may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs.

The following notes may help.

- **Part 1. Accident — being involved.**
- **Part 2. Accident — being a witness.**
- **Part 3. Medical assistance.**

Part 1. Accident — being involved

If you are involved in an accident you are advised to do as follows:

Stop immediately and remember to turn off the engine and apply park brake.

Remember that time is vital. Remain calm and alert. Think quickly and clearly.

Give all possible assistance to all injured persons. (See Part 3 Medical Assistance).

Send for police and ambulance if anyone has been injured. Send information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.

Perhaps take charge of the situation.

Warn all other traffic approaching the scene. Turn off ignition switches. Stop any smoking near split petrol. In darkness, try and light up the area to warn others.

Clear the road of accident debris.

Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.

If damage to property only has occurred, report the facts to the owner of the damaged property or to his or her representative; to any police present at the scene or to the nearest Police Station.

Try and note all important facts because such details may be important if needed later.

Part 2. Accident — being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident, do this:

Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.

DO NOT stop at the scene of an accident *just to be a spectator*.

Where other people are already in attendance and giving assistance, **you should stop only if you can contribute assistance.**

Give what assistance you can to any injured persons. (See Part 3 Medical Assistance.)

Follow most of the steps suggested in Part 1. Perhaps you may have to take charge of the accident situation.

Part 3. Medical assistance

Keep calm and think clearly.

Your experience may not be much but do your best. Don't just stand by and let an injured person die.

- Look after the unconscious person first. Check for breathing. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.



Unconscious people can choke.

Carefully turn to one side.

Tilt the head back slightly.

Wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.

- You must be most careful in moving an injured person. Often it is best not to move at all but in conditions of danger, this is not always possible. Serious and permanent damage can be done to an injured neck or back if not supported during movement. **NEVER BEND A NECK OR BACK. KEEP THEM STRAIGHT.** All injured limbs require support when an injured person has to be moved.

Provided it is not dangerous to do so because of other injuries, an unconscious person will do best in the position illustrated here.



Lay the person on one side and — if it will not aggravate any injuries — then:

Bend the uppermost knee until the thigh is at right angle to the body.

Bend the uppermost arm and elbow so that the hand lies near the face.

Gently pull the underneath arm so that it rests straight on the ground free of any body weight.

- Try to stop bleeding by applying direct pressure, using your hands, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound **BUT NEVER USE A TOURNIQUET.**

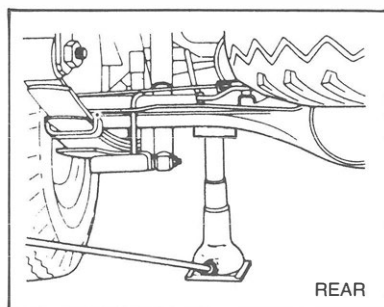
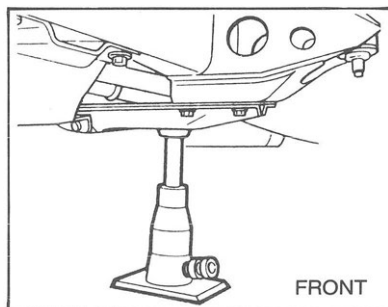
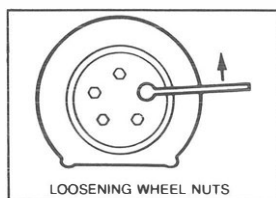
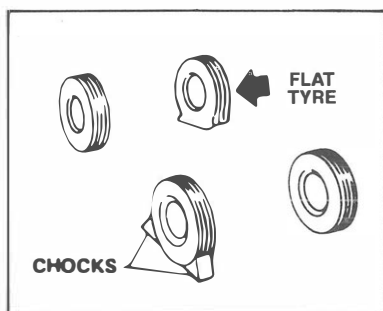
Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm *but not hot*. Best not to give any fluids and **NEVER ALCOHOL.**

- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending the neck, spine and injured limbs. **Keeping the neck and spine straight is most important.**

CAUTION

- Use jack only for lifting this vehicle when changing wheels.
- Never get beneath the vehicle when it is only supported by the jack.
- Do not start or run the engine while the vehicle is only supported by the jack.
- All passengers should be out of the vehicle when it is being jacked.

1. Park on level surface and set parking brake firmly.
2. Set automatic transmissions in park (manual transmissions in reverse) and remove ignition key.
3. Block the wheel diagonally opposite the jacking position.
4. Remove the jack and tools (which are installed under the driver's seat), the jack rod (installed on the radiator sill in the engine compartment) and the spare wheel (mounted on the back door).
5. Remove the wheel trim. Loosen, but do not remove, wheel nuts by turning the wrench anti-clockwise.
6. Insert one end of the jack rod into the jack and the other end of the jack rod through the wheel wrench. The wheel wrench then becomes an extended handle for the jack.
7. Position the jack under the vehicle, according to the illustration. Note that the rear jack position is under the rear axle.



Remove the wheel nuts and remove the wheel.

LS model: Change over wheel trim.

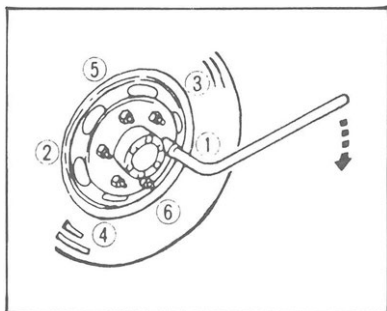
Replace the wheel.

Models other than LS: Replace wheel trim.

Replace the wheel nuts and tighten with your fingers. Then, tighten the wheel nuts with the wheel wrench, in the order shown.

Lower the vehicle until the wheel touches the ground and is held from rotating. Fully tighten the wheel nuts in the order shown.

Completely lower the vehicle and remove the jack using the handle in the bracket provided. Stow the tools and changed wheel, as shown on previous page.



CAUTION: As soon as possible after changing a wheel, you should have the wheel nuts tightened with a torque wrench to 88 Nm for steel wheel or 118 Nm for aluminium wheel.

Wheel nuts should be tightened evenly to correct torque in the numerical sequence shown.

Improperly tightened wheel nuts could eventually allow the wheel to come off while the vehicle is moving!

CAUTION: DO NOT attempt to 'push start' or 'tow start' your Jackaroo. These vehicles are fitted with a catalytic converter and if uncombusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

If the engine will not turn over and start, retry after turning off ALL electrical switches, i.e. front and rear window wipers, rear demister, radio, heater fan, headlights and interior light. Also, ensure battery posts and/or cables are clean and tight.

If the engine is still turning over too slowly to start, switch on the headlights (or interior light) then again turn the ignition key to "START". If the lights are not reduced to a dim glow either before or after cranking the engine, the problem is not of a discharged battery and you should contact your Holden Dealer. However, if they were very dim then you should follow the "jump starting" instructions below.

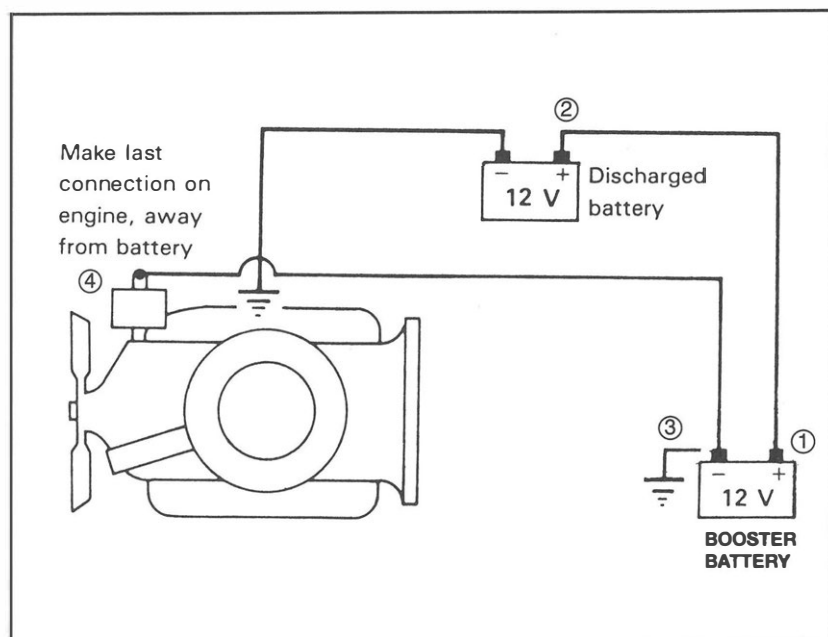
Jump Starting

CAUTION: Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery.

- Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.
- Do not smoke near a battery.
- Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.
- Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid will also damage paintwork and fabrics if not washed off immediately.
- Be sure any batteries that have filler caps are properly filled with fluid.
- Remove rings, metal watch bands and other metal jewellery before working around a battery.
- Carefully follow each step in the jump starting procedures.

Also, never use a quick charger to start your engine.

1. The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the other vehicle — that is being used to jump start the flat battery — must be the same voltage and also have a negative earth. So, check the specifications in the other vehicle's owner manual to see if it complies. Serious injury or damage may result if the wrong type of battery is used to energise the flat battery.
2. Position the two vehicles so that they are **not** touching and apply the parking brakes. Automatic transmissions are to be placed in PARK and manual transmissions in NEUTRAL. Turn off the ignition and all lights and accessories in both vehicles except the hazard flasher or any lights needed for the work area.
3. Remove vent caps from both the booster and the discharged batteries. Lay a cloth over the open vent wells of each battery. These two actions help reduce the explosion hazard always present when connecting "live" booster batteries to "dead" batteries.



4. Attach one end of the first jumper cable to the positive terminal of the **booster battery** (1) (identified by a red colour, + or P on the battery case, post or clamp) and the other end of the same cable to the positive terminal of the **discharged battery** (2).
5. Attach one end of the second jumper cable to the negative terminal (black colour, – or N) of the **booster battery** (3), and the other end to a solid, stationary, metallic point on the engine of the vehicle with the discharged battery (4). **Do not connect directly to negative post of the discharged battery).**
6. When making all connections take care that the clamps from one cable do not inadvertently touch the clamps on the other cable. Also ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.
7. Start the engine in the vehicle which has the good battery and run the engine at a moderate speed. Then start the engine in the vehicle that has the discharged battery.
8. When the engine starts, leave it running then remove the jumper cables by reversing the above installation sequence exactly. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.
9. Reinstall vent caps and discard cloths as these may have corrosive acid on them.

CAUTION: If the engine should overheat, as indicated by the Temperature Gauge reading or if you suspect there is a serious overheat condition immediate action is required as outlined in the following section. Continued operation of the engine **EVEN FOR A SHORT TIME** could result in a fire and the possibility of personal injury and/or severe vehicle damage.

If the coolant temperature gauge needle should move all the way to "H" position and remain there for more than 30 seconds, pull out of the traffic as soon as it is safe to do so and stop the vehicle. Leave the engine idling for a few minutes, whilst you step out of the vehicle to check that the cooling fan is working. If the fan is working and the temperature gauge needle has not returned to its normal position within the time then **stop** the engine and proceed as follows:

CAUTION: To help avoid being burned:

- **Do not open the engine hood if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the hood.**
- **Do not remove the coolant surge tank cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which is likely to cause serious personal injury.**

If no steam or coolant can be seen or heard, raise the engine hood. **If the coolant is boiling, wait until it stops before proceeding.** Look at the coolant level in the see-through surge tank.

If the coolant level in the surge tank is lower than the "MIN" line, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find major leaks, or spot other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected. If you do not find a leak or other problem, then the cooling system should be filled to the "MAX" line with specified coolant, see page 6-4.

Do not overfill the surge tank. The radiator filler cap should not be removed unless necessary. The coolant level should be checked regularly when the engine is cold. Supplement inhibitors or additives claiming to provide increasing cooling capability that have not been specifically approved by Isuzu-General Motors A L are not recommended for addition to the cooling system. It is the owner's responsibility to keep the freeze protection at a level commensurate with the temperature which may occur in the area of vehicle operation.

CAUTION: DO NOT remove the radiator cap while the engine is still hot because the cooling system will blow out scalding fluid and steam under pressure which is likely to cause serious personal injury and loss of coolant.

After taking one or more of the actions above and once the Temperature Gauge no longer signals an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the Temperature Gauge does not again show an overheat condition.

If overheating occurs again you should have your vehicle attended to, as soon as possible, by a qualified mechanic.

Freeing Vehicle From Sand, etc.

If it becomes necessary to rock the vehicle to free it from sand, mud or snow, move the gear shift lever from second to reverse. Do not race the engine. For best possible traction, avoid spinning wheels when trying to free the vehicle. Use of tyre chains is recommended for temporary assistance when traction is lost on ice or snow.

CAUTION:

Wheel spin should not exceed 55 km/h as indicated on the speedometer. Unless care is taken in limiting rear wheel spin, one spinning wheel can reach excessive speeds, resulting in possible tyre disintegration or differential failure, which could cause personal injury or extensive vehicle damage.

Towing by a Tow Rope Type attachment

The tow rope and safety chains must be attached to tow eye at the front. Make certain that the tow rope attachment to the tow vehicle is as low as possible.

For the sake of safety and to prevent damage to the vehicle and tow rope it is advisable to avoid jerky movements and to drive slowly during towing operations.

It is always preferable to have a vehicle towed by a tow truck. If this is not possible heed the following cautions.

Never tow a vehicle on four wheels with the ignition switch in LOCK.

Never tow a vehicle at speeds over 40 km/h.

Don't attach lifting hooks or chains to bumper bars or bumper brackets, or to any damaged part of the vehicle.

Only the driver should be in a towed vehicle.

Vehicles with damaged transmissions must not be towed unless the propeller shaft has been removed.

Vehicles with **automatic transmissions** must not be towed for more than 55 km or at over 55 km/h unless the propeller shaft is removed.

Towing by Tow Truck

The vehicle should be raised until the lifted wheels are a minimum of 10 cm from the ground, care should be taken to ensure adequate ground clearance at the opposite end of the vehicle.

In cases of rear end damage it may be necessary to lift the rear end of the vehicle and tow on the front wheels only. In such cases the steering wheel must be clamped in the straight ahead position using a clamping device designed for towing service use, such as those provided by towing equipment manufacturers. **Do not use the vehicle's steering column lock for this purpose.**

Vehicle **MUST NOT** be towed with the front free wheeling hubs locked, especially if it is to be towed with the rear of the vehicle lifted.

The fuel filter has a sedimentor chamber for settling water separated from fuel.

If the filter indicator glows on the instrument panel (refer page 1-3) the water in the sedimentor chamber must be drained.

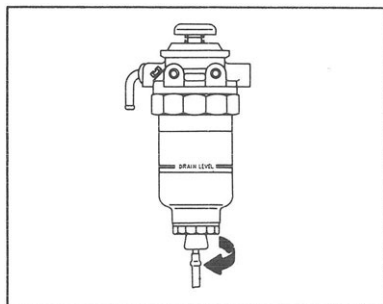
Open the engine hood and place a small container (approximately 0.2 litres capacity) at the end of the vinyl hose beneath the drain plug on the separator.

Loosen the drain plug (approximately five turns) and operate the manual pump up and down (about 10 times) until 0.1 litre of water has been drained.

After draining, securely tighten the drain plug and operate the manual pump up and down several times.

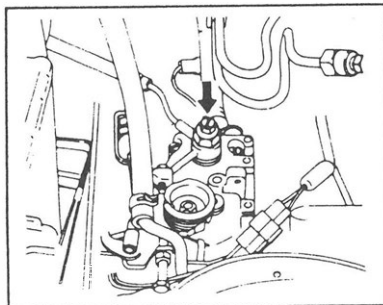
After starting the engine, check to see that no fuel leaks from the drain plug. Also check to see that the fuel line indicator light has turned off.

If water separator requires frequent draining, have the fuel tank drained for removal of water at your Holden Dealer.

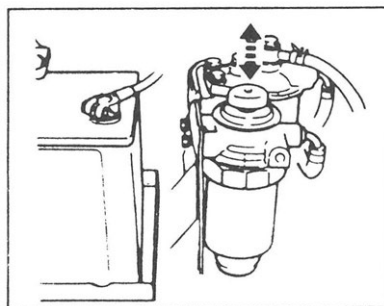


If the fuel tank has been emptied, the chance is that air might have entered the fuel system. With air in the fuel system, smooth flow of fuel into the engine is interrupted and to correct this, bleeding of the fuel system should be performed after refuelling.

1. Loosen the nut retaining the solenoid valve wire.
2. Loosen the solenoid valve.
3. Operate the priming pump until fuel comes out around the solenoid valve. Continue pumping until no air bubbles appear in the fuel being pumped out.



4. After bleeding, tighten the solenoid valve to 18ft lbs torque.
5. Tighten the wire retaining nut.
6. Operate the priming pump several times.



Warranty

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HOLDEN DEALERS

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Note: Dealership names and locations listed are effective at the time of printing. These may change from time to time without notice.

ISUZU-GENERAL MOTORS AUSTRALIA LIMITED

New Vehicle Warranty

ISUZU-GENERAL MOTORS AUSTRALIA LIMITED, HEREINAFTER I-GM, HEREBY WARRANTS THAT IT WILL MAKE GOOD, WITHOUT CHARGE, ANY DEFECT WHICH APPEARS IN THE VEHICLE IDENTIFIED IN THE VEHICLE IDENTIFICATION FOUND ON THE INSIDE OF THE FRONT COVER OF THIS HANDBOOK.

Provided

1. the defect has been notified to an authorised Holden Dealer or Service Dealer:
 - (a) before the vehicle has travelled a distance of 20,000 km, or;
 - (b) within 12 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a Demonstrator vehicle within 12 months of the date when it was first placed into service by the Dealer) whichever comes first, and

2. the vehicle has been returned to an authorised Holden Dealer or Service Dealer
And

3. the Dealer has determined that the defect complained of *is* one of material or workmanship and *is not* caused by:
 - (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or by neglect
 - (b) operation of the vehicle after it is known to be defective
 - (c) accident or deliberate act
 - (d) atmospheric fallout or flood, hail, salt, etc.
 - (e) failure to carry out proper maintenance service
 - (f) use of incorrect types and grades of fuel, oil or lubricants
 - (g) alteration or modification of the vehicle by any party not authorised by I-GM
 - (h) the fitting of parts or accessories not marketed by I-GM
 - (i) any work carried out on the vehicle by someone other than an authorised Holden Dealer or Service Dealer.

BY THE DEALER (or as otherwise decided by I-GM) MAKING GOOD THE DEFECT BY REPAIR OR, AT THE OPTION OF I-GM, BY REPLACEMENT.

Excluded from this Warranty are

- defects in tyres (these being warranted by their manufacturers), and services such as engine tuning, brake adjustment, replacement of air and oil filters, wiper rubbers, etc. which are required as part of normal vehicle maintenance.

This Warranty applies only to vehicles operated in Australia and is given to the person who is entitled to possession of the vehicle whether as owner, lessee or otherwise and is given in addition to all rights conferred by law on that person.

Owners of vehicles operated outside Australia should consult their local dealer regarding the warranty applicable to their vehicles.

SPECIAL NOTICES TO OWNERS

UNAUTHORISED STATEMENTS IN RELATION TO I-GM PRODUCTS

No Holden dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any I-GM product or in connection with the supply of any I-GM product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by I-GM in its published sales literature, and I-GM does not accept any liability for any such unauthorised action.

WARRANTY ON I-GM REPLACEMENT PARTS

I-GM warrants in respect of I-GM parts and accessories required as replacement parts, that it will make good by repair or at its option by replacement any defect occurring in any such I-GM parts and accessories within 12 months from the date of acquisition or in the case of an I-GM part or accessory which has been installed in a vehicle by a Holden Dealer or Service Dealer before such vehicle has travelled a distance of 20,000 kms from the date of installation, whichever first occurs.

This section is designed to assist you in understanding the terms of the I-GM Warranty provided with your new vehicle.

The following are some of the most frequently asked questions for which detailed answers have been provided.

1. Q. How do I go about obtaining I-GM Warranty Service?

- A.** It is the responsibility of the Selling Dealer to provide I-GM Warranty Service, therefore you should take your vehicle to the Dealer whenever I-GM Warranty Service is required. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this book are required by the Dealer whenever you request I-GM Warranty Service.

Note that the 1000 kilometre Warranty Service may be carried out by any Holden Dealer, provided you have a letter of introduction from the Selling Dealer. This letter must be arranged prior to obtaining the 1000 kilometre service.

2. Q. What should I do if, in an emergency, I-GM Warranty Service is required and an Authorised Holden Dealer is not available to provide such service at that time?

- A.** If in an emergency, a repair, replacement or adjustment (covered by the I-GM New Vehicle Warranty) is required to enable your vehicle to be operated safely and is not practical for you to have that service performed by an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified service technician or repairer. A claim for the reasonable cost may be made through the Authorised Holden Dealer who would normally provide you with I-GM Warranty Service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and/or the completion of any required I-GM Warranty Service as soon as possible.

3. Q. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the I-GM New Vehicle Warranty?

- A.** You should contact the nearest Authorised Holden Dealer as soon as possible and arrange for that Dealer to carry out the required I-GM Warranty Service.

4. Q. Will I have to pay for any costs or expenses in connection with the provision of I-GM Warranty Service?

- A.** All parts and labour used in carrying out I-GM Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever I-GM Warranty Service is to be carried out by the Servicing Dealer it is your responsibility to deliver your vehicle to the Servicing Dealer's premises.

If, as a result of a defect which is covered by the I-GM New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required I-GM Warranty Service, I-GM will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or the Holden's Customer Assistance Services to obtain guidance.

- 5. Q. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the I-GM New Vehicle Warranty?**
- A.** No, these items are not covered. The I-GM New Vehicle Warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials and workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle will be recognized under the I-GM New Vehicle Warranty. The rights and remedies which are available to you under any relevant Statutory Enactment or otherwise, at law, in connection with any such claim for compensation, you must pursue outside the ambit of the I-GM New Vehicle Warranty.
- 6. Q. Will I have to pay for Maintenance costs during the Warranty Period?**
- A.** Maintenance costs are not covered by the I-GM New Vehicle Warranty. However, the scheduled 1,000 kilometre service specified in chapter 8 of the handbook is free of charge (except for any lubricants or filters used), provided that your vehicle has been operated under normal operating conditions (refer page 8-2) and provided also that no modifications (other than a modification made by or at the direction of I-GM) has been made to your vehicle. The Maintenance Schedules in this handbook specify the minimum maintenance required for your vehicle operating under normal conditions.

The Maintenance items, except where they are required as a result of defects in materials or workmanship, for which you will be required to pay include:—

- Engine tune-up — including replacing spark plugs.
- Replacement of all filters.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission after the 1,000 kilometre service.
- Adding to or replacing lubricants.
- Adding to or replacing air conditioning refrigerant.
- Any necessary adjustments to drive belts, transmission, clutch, parking brake, etc.
- Wheel balancing — after 5,000 kilometres.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads — after the 1,000 kilometre service.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery re-charging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment — after the 1,000 kilometre service.
- Door or engine hood or lock adjustments.
- Glass or channel adjustments — after the 1,000 kilometre service.
- Body rattle, squeaks and general tightening of bolts, fastenings and fittings — after the 1,000 kilometre service.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Clutch facings

7. Q. Are my tyres covered by the I-GM Vehicle Warranty?

- A.** No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

8. Q. Are I-GM parts and accessories covered by warranties?

- A.** If you purchase an I-GM part or accessory from an Authorised Holden Dealer it will be warranted by that Dealer under the I-GM parts and accessories Warranty against defects in materials or workmanship for a period of 12 months from the date at which you purchased it. In the case of an I-GM part or accessory which has been installed in a vehicle by a Holden Dealer or a Service Dealer it will be warranted for a period of 12 months or a distance of 20,000 kms from the date of installation, whichever occurs first.

Maintenance items such as filter, spark plugs, wiper blades and brake pads/linings will require replacement as part of normal maintenance. Such replacements are not the subject of this warranty.

9. Q. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by I-GM?

- A.** The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplement additives are *not* recommended; their use will not only increase operating costs, but may be detrimental to the operation of your vehicle.

We want you to be happy with your new vehicle together with the people you deal with while you have the vehicle.

Normally, any problems which may arise with the sales transaction, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service Department.

We realise however, that, with the best intentions, misunderstandings do occur sometimes.



Accordingly, we suggest you discuss any concern with one of the Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager - go to the General Manager or to the Dealer himself.

By now you should have satisfaction. If not, you have the facility of the Holden's Customer Assistance Service office at your disposal.



The Holden's Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is 647 1016. Outside the Melbourne Metropolitan area, the number is 008 03 3349.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden's Service Parts Operations on (03) 797 7341

Naturally, telephoning is the quickest and the best way of contact. However, if you prefer to write the address is:



The Manager
I-GM Customer Assistance Services
PO Box 107
Port Melbourne, 3207.

Your letter should clearly outline your concern or query, and include the following:



- Your name and address
- Telephone numbers, both private & Business
- Servicing dealership name and address
- Vehicle model
- Vehicle identification number (VIN)
- Date of purchase
- Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

N.S.W. Metropolitan

ARNCLIFFE **Suttons Motors (Arncliffe) Pty Ltd** - 93 Princes Highway
ASHFIELD **Muir's Motors (Ashfield) Pty Ltd** - 252 Parramatta Road
BALGOWLAH **Mitchell Cox Holden** - 164 Condamine Street
BANKSTOWN **Princeton Holden** - 444 Chapel Road
BAULKHAM HILLS **Tony Packard Holden** - Cnr Victoria Ave & Windsor Rd
BLACKTOWN **West City Holden** - 120~128 Sunnyholt Road
CABRAMATTA **Autovillage Holden** - 266 Hume Highway
CAMPBELLTOWN **Paul Wakeling Holden** - Cnr Blaxland & Campbelltown Rds
CHULLORA **Suttons Motors (Chullora) Pty Ltd** - Cnr Hume Hwy & Waterloo Road
CROWS NEST **J.N. Caldwell (Holdings) Pty Ltd** - 1 Alexander Street
DEE WHY **Peninsula Holden** - Cnr May & Mooramba Roads
GORDON **Sundell Holden** - Cnr 836 Pacific Hwy & McIntyre Street
HOMEBUSH **Suttons Motors (Homebush) Pty Ltd** - 112 Parramatta Road
HOMEBUSH **Gilbert & Roach Pty Ltd** - 167~173 Parramatta Road
KINGSFORD **John Pellegrini Holden** - 263~271 Anzac Parade
LAKEMBA **Michael Lyons Holden** - 817 Canterbury Road
LIVERPOOL **A.C. McGrath & Co Pty Ltd** - Cnr Hume Hwy & Boundary Road
MIRANDA **Greg Ball Holden** - 1~3 Kiora Road
NEWPORT **Mobil-Newport** - Cnr Barrenjoey Rd & Seaview Ave
PARRAMATTA **Boyd's Parramatta** - 65 Church Street
PENNANT HILLS **Barry Smith Holden** - 351~355 Pennant Hills Road
PENRITH **Triway Holdings Pty Ltd** - 39~47 Henry Street
ROCKDALE **Peter Terry Holden** - 571 Princes Hwy
RYDE **Hunter Holden** - 603~605 Victoria Road
ST. MARY'S **John Young Holden** - Cnr Glossop & Harris Streets
WAITARA **Suttons Motors Waitara Pty Ltd** - 90 Pacific Hwy
WINDSOR **Hawkesbury Valley Holden** - 18 Macquarie Street

N.S.W. Country

ADELONG **Robert Broadhurst Holden** - Tumut Street
ALBURY **Brian White Holden** - 647~657 Dean Street
ARDLETHAN **Carr's Engineering** - 4 Mirrool Street
ARMIDALE **New State Motors** - 103 Rusden Street
BALLINA **Quayside Motors** - Pacific Highway
BARADINE **John Farrell & Co.** - Wellington Street
BARHAM **Hall's Motors Pty Ltd** - 44 Noorong Street
BATHURST **Bathurst Motors Pty Ltd** - 54 Durham Street
BATLOW **Robert Broadhurst Holden** - Pioneer Street
BEGA **South Coast Holden** - 247 Carp Street
BELLINGEN **E.H.H. Raymond Pty Ltd** - Broadway
BELMONT **Challenge Holden** - 444 Pacific Highway
BLAYNEY **Mitchell Holden** - 98 Adelaide Street
BOMBALA **Delcott Engineering Pty Ltd** - Maybe Street
BOOROWA **Boowowa Auto Repairs** - 40 Marsden Street
BOURKE **Bowden & Co (Bourke) Pty Ltd** - Richard Street
BREWARRINA **Hertslet Holden** - Bathurst Street
BROKEN HILL **Donlee Motors Pty Ltd** - Cnr Galena & Rakow Streets
CANOWINDRA **Canowindra Motors** - Gaskill Street
CARDIFF **Brian Kelly Holden** - 35~39 MacQuarie Road
CASINO **McKinnon Holden** - 142 Barker Street
CESSNOCK **Geoff Boyd Holden** - 173~175 Wollombi Road
COBAR **Cobar Motors Pty Ltd** - Barton Street
COFF'S HARBOUR **Geoff King Holden** - Cnr Pacific Hwy & Thompson Rd
COOLAMON **Coolamon Motors** - Cowabbie Street

N.S.W. Country cont.

COOMA **Summit Holden** - 66~70 Sharp Street
COONABARABRAN **Alan McWhirter Holden** - John Street
COONAMBLE **Moody's Motors** - Aberford Street
COOTAMUNDRA **Jenkins Garage** - 111 Wallendoon Street
COROWA **R.W.E. Fraser & Co** - 218 Honour Avenue
COWRA **Waugoola Motors Pty Ltd** - Kendal Street
CROOKWELL **Crookwell Autos** - 114 Goulburn Street
DENILIQUIN **Burchfield Bros & Co** - 112~114 End Street
DORRIGO **Phil Noble Motors** - 46~48 Hickory Street
DUBBO **Graeme Coxon Holden** - Cnr Darling & Bultje Streets
EDEN **Ron Doyle** - 113 Imlay Street
FINLEY **Riverina Garage Finley** - 104 Murray Street
FORBES **Paddison & Co** - Cnr Rankin St & Court Lane
GILGANDRA **Whitemans Holden** - 106 Warren Road
GLOUCESTER **Grahame's Garage Pty Ltd** - 1 Park Street
GOSFORD **Noble Holden** - Pacific Highway
GOULBURN **Geissler Motors** - 279~298 Auburn Street
GRAFTON SOUTH **Ken Casson Holden** - 71~75 Spring Street
GRENFELL **Terry Carroll Motors Pty Ltd** - 40 Alexandra Street
GRIFFITH **Leo Franco Holden** - 152 Yambil Street
GULARGAMBONE **Gulargambone Motors** - Bourbah Street
GUNDAGAI **McPherson Motors Pty Ltd** - Sheridan Street
GUNNEDAH **Namoi Valley Motors** - 48 Barber Street
GUNNING **Bailey's Garage Pty Ltd** - Yass Street
GUYRA **Burgess Garage Pty Ltd** - 131~143 Bradley Street
HARDEN **Ginty & O'Leary** - Cnr Station & Albury Streets
HAY **Royce Curtis Motors** - 168 Lachlan Street
HOLBROOK **Lieschke Motors Pty Ltd** - Albury Street
INVERELL **Gaukroger Sales Pty Ltd** - Vivian Street
JERILDERIE **Jerilderie Motors** - Jerilderie Street
JUNEE **Junee Motors** - Seignior Street
KANDOS **Chrisfield Holden** - 11 Angus Street
KATOOMBA **Arthur Brown Holden** - 136 Great Western Hwy
KEMPSEY **Thoroughgood Motors** - 118~132 Belgrave Street
KIAMA **Glen Fulton Holden** - 35~41 Collins Street
KURRI KURRI **Fren's Holden** - 281 Lang Street
KYOGLE **O & A Holden** - 128~134 Summerland Way
LEETON **John Ryan Holden** - 47 Pine Street
LISMORE **John Chant Motors Pty Ltd** - 21~27 Carrington Street
LITHGOW **Lithgow Motors** - 255 Main Street
MACKSVILLE **Eastland Auto Centre** - 18~22 Cooper Street
MACLEAN **O'Halloran Motors** - 175 River Street
MAITLAND **R.H. Taylor Holden** - 557~567 High Street
MOREE **Keith Haddad Holden** - Cnr Boston & Heber Streets
MORUYA **Surfair Holden** - 88 Vulcan Street
MOSS VALE **Vagg & Partners Holden** - 160 - 162 Argyle Street
MUDGEES **Blue Ribbon Holden** - 10 Sydney Road
MULLUMBIMBY **Tony Carsburg Holden** - 2 Argyle Street
MUSWELLBROOK **Upper Hunter Motors Pty Ltd** - 116 Bridge Street
NARRABRI **Allan Cooper Holden** - 181 Maitland Street
NARRANDERA **C. & S. Coelli** - 7 King Street

N.S.W. Country cont.

NARROMINE **L.E. Stanley Pty Ltd** - Dandaloo Street
NEWCASTLE **Young & Green Pty Ltd** - 745 Hunter Street
NOWRA **Glendon Motors Holden** - 301~313 Princes Highway
ORANGE **Canobolas Holden** - 348 Summer Street
PARKES **Go Motors** - Cnr Mitchell & Clarinda Streets
PEAK HILL **S.Leary & Sons Pty Ltd** - Mingelo Street
PORT MACQUARIE **Todd Holden** - 16~20 Clarence Street
QUIRINDI **Browning Motors** - 82 Henry Street
SCONE **Upper Hunter Motors (Scone)** - 91 Kelly Street
SINGLETON **Lancaster Holden** - 80 John Street
TAMWORTH **Kensells Holden** - Cnr Bourke St & Kable Ave
TAREE **Hardes Auto House** - 61 Manning Street
TEMORA **Rod Lovering Holden** - 2 Stockinbingal Road
TENTERFIELD **Sexton & Green (Sales & Service) Pty Ltd** - 148 Rouse Street
TORONTO **Young & Green (Toronto) Pty Ltd** - Carey Street
TUMBARUMBA **Broadhurst Autos** - Albury Street
TUMUT **Tumut Auto Sales & Service Pty Ltd** - Fitzroy Street
ULLADULLA **Johnston Holden** - 150 Princes Highway
TWEEED HEADS **Tweed Motors Pty Ltd** - 75~79 Pacific Highway
VALLEY HEIGHTS **Kerrys Motors Pty Ltd** - 28 Great Western Highway
WAGGA **Wagga Motors Pty Ltd** - 32 Dobney Avenue
WALCHA **Bowden's Garage Pty Ltd** - Derby Street
WALGETT **Walgett Garage Pty Ltd** - Wee Waa Street
WALLA WALLA **D.E. Lieschke & Son Pty Ltd** - Commercial Street
WARIALDA **Roger Moore** - Hope Street
WARILLA **Wilson's Warilla Pty Ltd** - 29 Shellharbour Road
WARREN **Fuller Bros** - Dubbo Street
WELLINGTON **Gersbach's Garage Pty Ltd** - 92 Lee Street
WEST WYALONG **West Wyalong Motors** - 183 Main Street
WOLLONGONG **Dwyers Pty Ltd** - 31~33 Crown Street
WOODENBONG **Frawley Bros Holden** - Unumgar Street
WYONG **W.M. Holden** - Pacific Highway
YASS **Bill Nesbitt Holden** - 221 Comur Street
YOUNG **Harden & Geelan Holden** - 48 Boorowa Street

A.C.T.

BELCONNEN **Gerald Slaven Holden** - Josephson Street
BRADDON **Beazley & Bruce** - 44 Mort Street
PHILLIP **Commonwealth Motors Pty Ltd** - 158 Melrose Drive

Vic. Metropolitan

ABBOTSFORD **East City Holden** - 601 Victoria Street
BERWICK **Barry Bourke Holden** - 755 Princes Highway
BUNDOORA **Watson Holden** - 413 Grimshaw Street
BURWOOD **Penfold Holden** - 63 Burwood Road
CAULFIELD **Booran Holden** - 1049 Glenhuntly Road
CHELSEA **Harrison Holden** - 370 Nepean Highway
CHELTENHAM **Balmoral Holden** - 1212 Nepean Highway
DANDENONG **Graeme Blanchard Holden** - Princes Highway
ELSTERNWICK **Reg Hunt Holden** - 77 Nepean Highway
ESSENDON **Preston Motors (Essendon) Pty Ltd** - 205~211 Keilor Road
FAWKNER **Mantello Holden** - 1263 Sydney Road
FERNTREE GULLY **Neilson Holden F.T.G.** - 980 Burwood Highway
FOOTSCRAY **Patterson Cheney Trucks** - 130 Moreland Street
FOOTSCRAY **Alan Mance Holden** - 435 Barkly Street
FRANKSTON **Noel Gould Holden** - 140 Dandenong Road
GEELONG **R & B Smith Holden** - 510 Moorabool Street
GEELONG **Winter & Taylor (Sales) Pty Ltd** - 23 Cavendish Street
GLEN WAVERLEY **Geoff Brady Holden** - 565~577 Springvale Road
HASTINGS **Westernport Holden** - 843 Frankston~Flinders Road
LILYDALE **Noel Dight Holden** - 344 Main Street
MORNINGTON **John Collins Holden** - 976 Nepean Highway
OAKLEIGH **Garry & Warren Smith** - 1575 Dandenong Road
PRESTON **Arnold Holden** - 573~603 High Street
RINGWOOD **Patterson Cheney Holden** - 45~57 Maroondah Highway
SOUTH MELBOURNE **Patterson Cheney Holden** - 132 Sturt Street
SUNSHINE **Kevin Dennis Holden** - 272 Ballarat Road
WERRIBEE **Ballan Holden** - Princes Highway
WEST MELBOURNE **Reg Hunt Holden** - 577 King Street

Vic. Country

ALEXANDRA **Alexandra Tyre & Hire** - 79 Grant Street
ARARAT **David Reid Motors** - High Street
BAIRNSDALE **The Big Garage** - 199 Main Street
BALLARAT **Peter Amor Motors** - 2~26 Mair Street East
BENALLA **Arnott's Motors** - 88~90 Bridge Street
BENDIGO **Ron Poyser Holden** - Cnr High & Myrtle Streets
BIRCHIP **R.L. & C.J. Bales** - 38 Cumming Avenue
BOORT **Jaron Motors** - 55 Godfrey Street
CAMPERDOWN **Ross Holt Holden** - 114 Manifold Street
CASTERTON **Coxons Autos** - 139 Henty Street
CHARLTON **K.V. Charlton** - 70 High Street
COBRAM **Frank D'Alberto Holden** - 56~60 Punt Road
COHUNA **Humphrey Motors Pty Ltd** - 13~15 Market Street
COLAC **Parker Bros Motors Co** - 224 Murray Street
CORYVONG **Boers Motors** - 88~90 Hanson Street
DAYLESFORD **K.R. Little Pty Ltd** - Vincent Street
DERRINALLUM **Urquhart Motors** - Main Street
DIMBOOLA **Westerfield Motors Pty Ltd** - 64 Lloyd Street
DONALD **O.A. Shilton & Sons Pty Ltd** - Wood Street
ECHUCA **Echuca Motors** - 148 Murray Valley Highway
EUROA **Croxford Holden** - 41 Clifton Street
FOSTER **Ray Dower Motors** - 78 Main Street
HAMILTON **Peter Sandow Motors Pty Ltd** - 261 Gray Street
HOPETOUN **Hopetoun Motors** - 98 Lascelles Street
HORSHAM **Ranley Holden** - 22 O'Callaghans Parade

Vic. Country cont.

KANIVA **Kaniva Motors** - 82 Commercial Street
KERANG **David Keeley Motors** - 86~90 Wellington Street
KOOWEERUP **Gray Blakey Holden** - Station Street
KORUMBURRA **Peter Dunlevie Holden** - 42 Commercial Street
KYABRAM **D'Alberto Holden** - 60 McEwen Road
KYNETON **Mollison Motors Pty Ltd** - 167 Mollison Street
LEONGATHA **Gleeson Holden** - 37~43 Bair Street
MAFFRA **Knight Paterson Holden** - Johnson Street
MANSFIELD **Christopher & Kirley Automotive Services** - Early Street
MARYBOROUGH **Graham Jacka Holden** - 35 Nolan Street
MILDURA **Stuart & Harrison (Sales) Pty Ltd** - 24~32 Deakin Avenue
MINYIP **Munro Sales & Service** - 8 Market Street
MIRBOO NORTH **Ridgeway Motors** - 106 Ridgeway Road
MORTLAKE **W. Christian (Mortlake) Pty Ltd** - 107 Dunlop Street
MURRAYVILLE **Peers Motors** - McKenzie Street
NATHALIA **BHB Motors** - 6 Blake Street
NHILL **Ivan Morrow Motors Pty Ltd** - 71~73 Nelson Street
NULLAWIL **Nullawil Motors & General Engineers** - Calder Highway
ORBOST **Merlin Motors** - Stanley Street
PORTLAND **Reynolds Holden** - Henty Highway
QUAMBATOOK **Quambatook Auto Services** - 32 Gutherie Street
ROCHESTER **Bruce Hocking Motors Pty Ltd** - 71 Moore Street
RUTHERGLEN **Jasper Bros Pty Ltd** - Main Street
SALE **Sturgess Smith Holden** - 232~240 York Street
SEA LAKE **Paddy Smith Holden** - Calder Highway
SEYMOUR **Neil Beer Holden** - 49 Emily Street
SHEPPARTON **Parker Bros Auto Co** - Melbourne Road
STAWELL **Tonkin Motors** - 71~73 Main Street
ST. ARNAUD **Maurie McGrath Motors** - 126 Napier Street
SWAN HILL **Alan Rogers Motors** - 59~61 Nyah Road
TALLANGATTA **Crispin Motors** - 21 Towong Street
TIMBOON **Timboon Motors** - Bailey Street
TRARALGON **Colin Watson Holden** - Princes Highway
UNDERBOOL **A.J. Gloster & Sons** - Cotter Street
WANGARATTA **Alan Capp (New Cars) Pty Ltd** - Tone Road
WARBURTON **Col McKenzie Holden** - Main Street
WARRACKNABEAL **Amor Motors Aubrey Truck Sales** - 33 Woolcock Street
WARRAGUL **John Carter Holden** - 47 Queen Street
WARRNAMBOOL **Callaghan Motors Pty Ltd** - 133~137 Fairy Street
WONTHAGGI **J.P. Holden** - 2 Murray Street
YARRAM **Graham Hellen Motors Pty Ltd** - Bland Street
YARRAWONGA **Pigdon's Pty Ltd** - Belmore Street

Tas.

BURNIE **Motors Burnie** - 84~89 Marine Terrace
DEVONPORT **Motors Devonport** - Victoria Parade
HOBART **Motors Pty Ltd** - 179 MacQuarie Street
KING ISLAND **King Island Motors Pty Ltd** - Netherby Road, Currie
LAUNCESTON **Motors Launceston** - Elizabeth Street
SMITHTON **Motors Pty Ltd** - 116 Nelson Road
ULVERSTONE **Motors Pty Ltd** - 99 Reibey Street

Qld. Metropolitan

ALBION **Bill Harrison Car Sales** - Frodsham Street & Crosby Road
ASPLEY **Zupps (Aspley)** - 1442 Gympie Road
BEENLEIGH **Crest Holden** - 81~83 Logan River Road
BOOVAL **Zupps Holden** - 246 Brisbane Road
MOOROOKA **John Sivyver Holden** - 1060 Ipswich Road
MT. GRAVATT **Zupps Motors Pty Ltd** - 1310 Logan Road
NEWSTEAD **Eagers Retail Pty Ltd** - 95 Breakfast Creek Road
NUNDAH **Eagers (Northside)** - 1319 Sandgate Road
PETRIE **North Pine Motors** - Gympie Road
REDCLIFFE **Village Holden** - 425 Elizabeth Avenue
SPRINGWOOD **Motorama Holden** - Cnr Pacific Highway & Brennan Street
WINDSOR **Leach Holden** - 143 Newmarket Road
WOOLLOONGABBA **Armstrong Holden** - 73 Ipswich Road
WYNNUM **Doug Barton Holden** - 200 Tingal Road

Qld. Country

ATHERTON **Redding Motors Pty Ltd** - 2 Cook Street
AYR **Honeycombes Sales & Service** - 213~217 Queen Street
BEAUDESERT **Lee Holden** - 57 Brisbane Street
BILOELA **Richard Cooley Holden** - Dawson Highway
BLACKWATER **B.P. Tyre Power** - Capricorn Highway
BOWEN **McDermott Holden** - 98 Herbert Street
BUNDABERG **Ross Gray Holden** - Takalvan Street
CABOOLTURE **Becham Holden** - Bribie Island Road
CAIRNS **Ireland Holden** - 227~233 Mulgrave Road
CALOUNDRA **Drinnan Holden** - Caloundra Road
CAPELLA **S.A. Rickett & Co** - Peak Downs Street
CHARLEVILLE **Alan Dobbin Holden** - 129 Alfred Street
CHARTERS TOWERS **Peters Holden** - 57 Mosman Street
CHINCHILLA **Ainsworth Motors & Machinery Pty Ltd** - 55 Chinchilla Street
CLONCURRY **Cloncurry Motors** - 59 Scarr Street
CROWS NEST **Dennis Nissen Motors** - 14 William Street
CUNNAMULLA **South West Autos** - 25 John Street
DALBY **Johnson's Holden** - 36 Drayton Street
EMERALD **Leahy Motors** - Clermont Street
GATTON **Gatton Auto Centre** - 67 Railway Street
GLADSTONE **Andersons Auto City** - 56 Yaroon Street
GOONDIWINDI **Border Holden** - Cnr Albert & Russell Streets
GYMPIE **Madills** - 35 Mellor Street
INGHAM **Origlasso Motors** - 99 Lannercost Street
INNISFAIL **I.C. Taylor Pty Ltd** - 117 Edith Street
JULIA CREEK **Julia Creek Motors Pty Ltd** - Burke Street
KILCOY **Hobart's Garage** - 58 Mary Street
KINGAROY **John Dundas Pty Ltd** - 38 King Street
LAIDLEY **Buhse's Garage Pty Ltd** - 5 Spicer Street
LONGREACH **Longreach Motors** - 33 Swan Street
MACKAY **Pioneer Holden** - Cnr Gordon & Wellington Streets
MACKAY **James Crocker & Sons Pty Ltd** - 17 Wellington Street
MAREEBA **Borman Motors Pty Ltd** - 76 Byrne Street
MAROOCHYDORE **Sunco Holden** - Wisers Road
MARYBOROUGH **Whitaker Holden** - 109~111 March Street

Qld. Country cont.

MOUNT ISA **Barkly Motors Pty Ltd** - Marian Street
MURGON **Clifton Motors** - McAllister Street
NAMBOUR **Kallenbach Motors** - 139 Howard Street
NANANGO **Nanango Motors Pty Ltd** - 72~74 Drayton Street
NOOSA HEADS **Gilbert Motors Pty Ltd** - Cnr Cooroy Noosa Rd & Coral Tree
PROSERPINE **Crossley Car Whitsunday Pty Ltd** - 162~164 Main Street
QUILPIE **Quality Motors** - Boonkai Street
ROCKHAMPTON **Lawrence's** - 327 Richardson Road
ROMA **Maranoa Multi Agencies** - Bowen Street
SOUTHPORT **Lockhart Holden** - Cnr Nerang Road & Olsen Avenue
SPRINGSURE **Springsure Motors** - Eclipse Street
ST. GEORGE **Halpin Motors** - 39~41 Grey Street
STANTHORPE **Central Motors** - 42 Maryland Street
TARA **Shaw Motors** - 10 Wilson Street
TOOWOOMBA **Eagers Retail Pty Ltd** - Cnr James & Hume Streets
TOWNSVILLE **Tony Ireland Holden** - 87~91 Charters Towers Road
TULLY **Island Coast Holden** - 12 Richardson Street
WARWICK **Deighton Motors Pty Ltd** - Grafton Street
WINTON **Gillespie Motor Dealers Pty Ltd** - Elderslie Street

N.T.

ALICE SPRINGS **Kittle Bros (Alice Springs) Pty Ltd** - Cnr Wills & Railway Terrace
DARWIN **Kerry Holden** - 21~25 Stuart Highway
KATHERINE **Master Motors** - 1130 Victoria Highway

S.A. Metropolitan

ADELAIDE **City Holden** - 203~221 Grenfell Street
ELIZABETH **Peter Page Holden** - Elizabeth Way
MALVERN **Claridge Holden** - 361~367 Unley Road
PORT ADELAIDE **Smiths of Port Adelaide** - 271 Commercial Road
REYNELLA **Southgate Holden** - 49~59 Main South Road
SOMERTON PARK **John H. Ellers** - 278 Brighton Road
THEBARTON **United Holden** - 1 Port Road
VALLEY VIEW **Plaza Holden** - 817~839 North East Road

S.A. Country

BALAKLAVA **Balaklava Motors** - 4 Wallace Street
BERRI **Rosenthal Bros Pty Ltd** - Vaughan Terrace
CEDUNA **Beck Motors Pty Ltd** - Poynton Street
CLARE **Brian Holmes Holden** - 7 Old North Road
CLEVE **Herbert Motors Pty Ltd** - Main Street
CRYSTAL BROOK **Newitt's** - 26 Brandis Street
CUMMINS **Trigg & Wedd** - 3 Umlauf Street
GAWLER **Steinhage Holden** - Cnr Murray & Bridge Sts
JAMESTOWN **Jamestown Motors Pty Ltd** - 23 Spalding Road
KADINA **J.H. Rosewarne Pty Ltd** - Graves Street
KEITH **Farmers Centre** - McBain Street
KINGSCOTE **Roberts Motors** - Telegraph Road
KINGSTON **Lecornu's Service Garage** - Agnes Street
LAMEROO **Des Pahl Motors** - 27 Chandos Terrace
LOXTON **Flight Motors Pty Ltd** - Bookpurnong Terrace
MAITLAND **Maitland Motors Pty Ltd** - 58 Robert Street
MALLALA **Curnow's Garage Pty Ltd** - Balaklava Road
MENINGIE **Peter Hood Holden** - Cnr Princes Highway & Coonalpyn Road
MILLICENT **Dennis Cowling Holden** - 98 George Street
MT. BARKER **Gilbert Motors (Mt. Barker) Pty Ltd** - 57 Adelaide Road
MT. GAMBIER **O.G. Roberts & Co** - Jubilee Highway West
MURRAY BRIDGE **Dutton Motors Pty Ltd** - 7 Adelaide Road
NARACOORTE **Kingcraig Motors Pty Ltd** - 158~164 Smith Street
PORT AUGUSTA **Williams Holden** - 38 Stirling Road
PORT LINCOLN **City Motors** - King Street
PORT PIRIE **Spencer Holden** - 50 Ellen Street
RENMARK **Rosenthal Motors Pty Ltd** - Ral Ral Avenue
STRATHALBYN **Gilbert Motors (Strathalbyn) Pty Ltd** - High Street
TANUNDA **E.H. Hage & Co Pty Ltd** - 50 Murray Street
TUMBY BAY **Seaview Motors** - Tumby Terrace
VICTOR HARBOR **Southern Holden** - 5 Victoria Street
WAIKERIE **Riverside Holden** - 6 Crush Terrace
WHYALLA **Mitchell Holden** - 64 Essington Lewis Avenue
YANKALILLA **Martin Motors Pty Ltd** - Main Street
YORKETOWN **Southway Holden** - 7 Minalaton Road

W.A. Metropolitan

CANNINGTON **Brian Gardner Holden** - 1308 Albany Hwy
FREMANTLE **Shacks Holden** - 64 Queen Victoria Street
GOSNELLS **Lance Gibbons Holden** - 2325 Albany Highway
MELVILLE **Melville Motors Pty Ltd** - 532~536 Canning Highway
MIDLAND **Goldy Holden** - 161 Great Eastern Highway
MORLEY **Metro Motors Pty Ltd** - 212 Walter Road
NAVAL BASE **Shacks Cockburn** - 15 Rockingham Road
OSBORNE PARK **North City Holden** - Cnr Scarborough Beach Rd & Harborne St
PERTH **City Motors** - 505 Newcastle Street
VICTORIA PARK **Young's Holden** - 529 Albany Highway
WANNEROO **Phoenix Holden** - 5 Berriman Drive

W.A. Country

ALBANY **Manley Stanwell Holden** - 92~98 Earl Street
BEVERLEY **Barnsley Holden** - 149 Vincent Street
BOYUP BROOK **Strapp Motors** - 7 Bridge Street
BRIDGETOWN **Kordics Bridgetown** - Hampton Street
BROOKTON **Coote Motors** - Robinson Road
BROOME **Norwest Holden** - McPherson Street
BRUCE ROCK **McCall Motors** - Butcher Street
BUNBURY **Wallace Holden** - 72 Spencer Street
BUSSELTON **Fennessy Holden** - 2~4 Bussell Hwy
CARNAMAH **T & H Walton Stores Pty Ltd** - Robertson Street
CARNARVON **North West Autos** - 175 Robinson Street
COLLIE **Station Motors** - 102 Throssell Street
CORRIGIN **Farmpower** - Kunjin Road
CRANBROOK **Cranbrook Motors** - 11~13 Gathorne Street
DALWALLINU **Reid & Inglis** - Johnson Street
DERBY **Derby Auto Repairs** - 27 Loch Street
ESPERANCE **Dempster Holden** - Norseman Road
GERALDTON **Youngs Motors** - Cathedral Avenue
GNOWANGERUP **G.S. Hendry & Co Pty Ltd** - Yougenup Street
KALGOORLIE **Kyle Motors** - 114 Boulder Road
KATANNING **Edwards Holden** - 159 Clive Street
KELLERBERRIN **Dowding Motors** - 1 Mitchell Street
KUNUNURRA **Elgee Automotive & Diesel Services** - Mango Street
MANJIMUP **Kordics** - Rose Street
MERREDIN **Carson's of Merredin** - 112 Barrack Street
MOORA **Frank Lewis Holden** - Gardiner Street
MORAWA **T & H Walton Stores - Morawa** - 6 Buron Road
NAREMBEEN **W.J. Nichols (1979) Pty Ltd** - 20 Churchill Street
NARROGIN **Narrogin Motors** - Cnr Ensign & Federal Streets
NORTHAM **Withnell Motors** - 58 Fitzgerald Street
PICTON **J.E.M. Sales** - 8 Yookson Road
PORT HEDLAND **Paul Moxham Holden** - 26~28 Anderson Street
WAGIN **Marley White & Co** - Tudor Street
WILLIAMS **R.S. Logie & Sons** - Rosselloty Street
WONGAN HILLS **Agro Machinery Pty Ltd** - Fenton Street
WYALKATCHEM **J.S. Rimmer & Sons** - Railway Terrace

Weekly Checks & Cleaning

Page

- 6-1 — Miscellaneous Checks
- 6-1 — Service Manuals
- 6-2 — Engine Oil Level
- 6-3 — Engine Oil Consumption Notes
- 6-4 — Coolant Level
- 6-5 — Automatic Transmission Fluid Level
- 6-6 — Clutch Fluid Level
- 6-7 — Brake & Power Steering Fluid Levels
- 6-8 — Tyres
- 6-10 — Fuse Box & Fusible Link
- 6-11 — Washer Fluids
- 6-12 — Bulb Replacement
- 6-13 — Cleaning

As well as taking your vehicle to be serviced (refer chapter 8-1) there are a few simple, weekly checks that the owner (or nominee) is required to make. These are shown on the following pages.

The following checks should be regularly done to ensure proper safety and the dependability of your car.

CHECK:

- that all exterior lights are working and that their appropriate interior indicators light up when in operation.
- Mirrors and glass are clean and not scratched.
- Automatic transmission T-bar — make sure that the indicator correctly lines up next to the gear selected.
- The aim of water on screen and condition of wipers.
- Demister operates.
- Horn works.
- All seat belt condition and operation (give it a sharp tug to make sure that it will 'lock' if necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.
- For oil/fluid leaks.

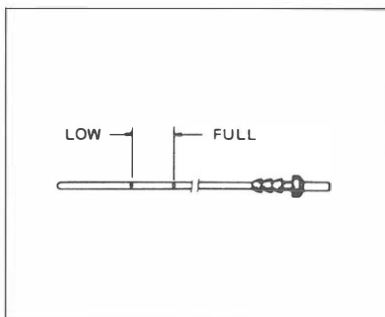
I-GM also publishes various service manuals which are available from your Holden Dealer.

It is the owner's responsibility to check the oil level weekly. The best time to check the engine oil level is when the oil is cold, such as first thing in the morning, before starting the engine.

To check the oil level accurately, the vehicle must be on level ground.

Remove the dipstick and wipe it clean with a clean cloth or paper. Insert the dipstick firmly all the way down, pause for a second then withdraw the dipstick and look at the oil level on it.

The oil level should be maintained between the two marks, neither going above the full mark nor under the low mark. Remember to reinsert the dipstick firmly after taking the reading.



If you need to add oil use:-

- ★ Petrol engines use SF (or SG) grade engine oil 20W/40 (or 20W/50 in high temperature areas). For prolonged use in snow areas, use of 15W/40 (SF or SG) is recommended.
- ★ Diesel engines use CD grade engine oil SAE30.

To add oil, remove the oil cap on top of the engine. Pour the required oil into the opening. Wait a few minutes for the oil to settle. Then check the oil level with the dipstick again. If still too low, add more oil, if now correct, replace the cap and the dipstick.

NOTE: When checking the oil level, the engine should also be inspected for oil leaks. If leaks are evident or if you often need to add oil, you should see your Holden Dealer.

NOTE: Non-detergent, recycled, reclaimed and other low quality oils are specifically not recommended. The use of break-in oils, tune-up compounds, friction-reducing compounds and other supplemental additives are not recommended; their use will only increase operating costs.

Every internal combustion engine uses a certain amount of oil, especially during the running-in period. Your engine is dependant on oil to lubricate the cylinder walls, pistons, rings and valve stems. A thin film of oil is left on the cylinder walls, some of which is carried into the combustion chamber and burnt during the combustion process. This also applies to the film of oil on the valve stems which is drawn into the combustion chamber and burnt.

There are several other factors that contribute to the rate of oil consumption in your engine, apart from mechanical malfunctions such as worn pistons, rings, valve stems and guides. These factors are: the way in which the vehicle is operated, the quality and grade of oil, the oil level, and dilution of the oil.

- **Operation of the Vehicle**

Sustained high engine speeds will increase oil consumption because higher speeds increase engine temperature which lowers oil viscosity thus allowing more oil to reach the combustion chamber. Towing a heavy load will also result in increased oil consumption due to increased engine temperature and hence lower oil viscosity.

It is recommended that heavy load towing be done only after the vehicle has been 'run-in'.

- **Quality and Grade of Oil**

Oil viscosity is a significant factor in oil consumption, therefore if you use an oil which is too "thin" (low viscosity) your oil consumption will increase.

- **Oil Level**

Maintaining a proper oil level is also an important factor in controlling oil consumption. An overfull crankcase allows the reciprocating parts of an engine to splash oil onto the cylinder walls in quantities greater than the piston rings can control. This excess oil will be drawn into the combustion chamber and burnt or may result in aeration of oil in the sump causing damage to the engine.

- **Dilution**

Probably the most prevalent complaint of oil consumption comes from the motorist whose vehicle is frequently driven at below normal operating temperatures. The oil becomes diluted by fuel and moisture which settles in the oil pan and may even raise the oil level creating a false reading on the oil level dipstick. For example, in a vehicle that has accumulated 1,500 kilometres of short distance or intermittent city operating and has consumed a normal amount of oil, the level may not have dropped from the "Full" mark, due to dilution. If this vehicle is driven for some distance at highway speeds on a warm day, the dilution elements evaporate, lowering the oil level and the motorist assumes the oil "lost" has been consumed in the highway operation.

After taking into account the above factors, you are still concerned that your engine has excessive oil consumption then you should discuss the situation with a Holden Dealer. Remember that an engine's oil consumption should not be judged until it has run at least 7,000 kilometres.

Oil Filter Replacement

The full-flow oil filter, with non-return check-valve, filters all the engine oil delivered by the oil pump. For this reason the interval of filter change is very important.

The oil filter should be replaced as shown in the maintenance schedule.

Under prolonged dusty driving conditions it is recommended that the oil filter be replaced more often.

The level of coolant should be checked at least weekly. This is simply a matter of looking at the level in the coolant reservoir. This is located next to the passenger's side headlamp.

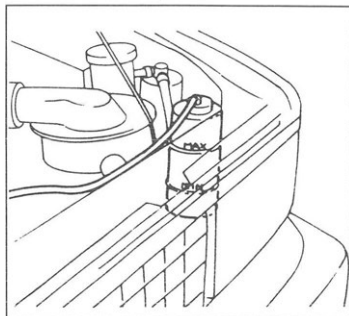
When the engine is cold, the coolant level should be at or above the minimum mark on the container. After the vehicle has been driven and the engine is at normal operating temperature, the level should be somewhere between half full and the maximum mark on the container.

The LONG LIFE COOLANT in your vehicle conforms to specification number HN 2043. This can be purchased as:

M40236 (1 litre)

M40237 (4 litres)

M40238 (20 litres)



If the container requires topping up, first premix a solution of 50% LONG LIFE COOLANT and 50% water. Flip up the cap on the top of the container, add the premixed solution and secure the cap.

Failure to use the specific Holden's coolant or maintain the specified concentration may result in voiding your warranty.

In emergency situations, plain water may be used temporarily in the cooling system until the correct Holden's LONG LIFE COOLANT is obtained as soon as possible from the nearest Holden Dealer.

It should be noted that the specified LONG LIFE COOLANT contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This LONG LIFE COOLANT also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to -16°C , provided the correct concentration is maintained.

If the recommended brand of coolant/anti-freeze fluid is not available, the radiator and cylinder case **MUST** be drained before parking in regions where temperatures of 0°C or below are encountered. This is to prevent possible bursting of the radiator, or cracking of the cylinder block, which can occur if the coolant freezes. Even so, damage to the heater core may still occur. Therefore, the use of the correct anti-freeze/coolant is recommended.

If you regularly have to top up the container you should see your Holden Dealer for a cooling system check.

CAUTION: Corrosion inhibitors and anti-freeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention.

Refer to page 4-7 if engine overheats.

If your vehicle is fitted with an automatic transmission, the fluid level should be checked weekly, by looking at the fluid level on the dipstick. Dirt in the transmission can cause breakdowns, so be careful when checking or adding fluid.

The vehicle must be standing on level ground with the engine running.

The gear shift selector should be in PARK and the hand brake applied.

Remove the dipstick, wipe it clean with a clean cloth or paper and reinsert it fully. Now remove it again, and read the fluid level.

If checking the fluid when transmission is warm (after the vehicle has been driven for at least 10 minutes) the level should be between the 2 markings above and below the 'H' mark.

If the transmission is cold, the fluid level should be between the 2 markings above and below the 'C' mark.

If adding fluid, use only *DEXRON II AUTOMATIC TRANSMISSION FLUID. Add the fluid in the same opening as the dipstick is stored in, and wait 1 minute for the fluid to settle. Again check the level with the dipstick and add further oil if necessary. Remember to always replace the dipstick.

NOTE: If fluid has to be added often, there may be a problem or leak — and you should see your Holden Dealer.

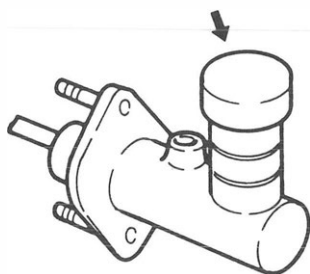
*DEXRON II is a registered trademark of General Motors Corporation.

The transmission T-bar, inside the vehicle, should also be regularly checked that the indicator is correctly lining up next to the gear selected.

The clutch fluid level should be checked weekly. The level should be maintained between the minimum and maximum markings.

The same fluid is used for both the brake system and the clutch system. So, if fluid needs to be added use heavy duty brake fluid meeting Holden's specification no. HN 1796. This can be purchased as Holden's part no. 92026651.

If you often need to add fluid, see your Holden Dealer to have the clutch system checked.

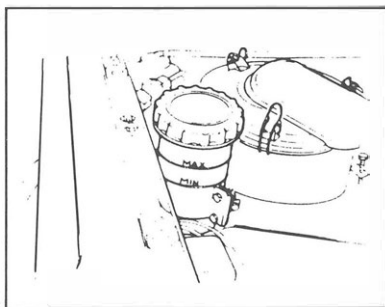


Power Steering

The level of fluid in the power steering reservoir should be checked weekly.

The best time to check is after the vehicle has been driven for a while so that the fluid is warm. A convenient time to do this is when stopping for petrol.

The level should be maintained between the minimum and maximum indicators on the outside of the reservoir.



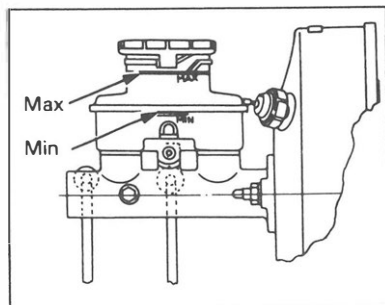
If fluid is at or below the minimum mark, fluid should be added. Unscrew the cap and add Dexron II* Automatic Transmission Fluid. Do not fill over the maximum level and remember to replace the cap tightly. If you often need to add fluid, you should see your Holden Dealer to have the system checked.

*Dexron II is a registered trademark of General Motors Corporation.

Brakes

The fluid level in the master cylinder should be checked regularly in conjunction with checking the oil and coolant levels. The fluid level visible through the 'see through' reservoir should be maintained between the MIN and MAX level markings. If the fluid is between those levels **do not** remove the master cylinder cap. Remember that brake fluid exposed to the atmosphere will quickly absorb moisture which in turn lowers the boiling point of the fluid as well as increasing risk of corrosion of brake components.

If the fluid level drops to 'MIN' or below, then you should top up to the 'MAX' mark with new brake fluid of the heavy duty type, meeting Holden's specification no. HN 1796. Holden's part no. 92026651)



NOTICE: Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system.

If the master cylinder requires regular topping up it indicates that there could be a malfunction within the brake hydraulic system in which case it should immediately be brought to the attention of your Holden Dealer. A gradual drop in fluid level usually occurs over a long period as the brake pads and linings wear out. This is normal.

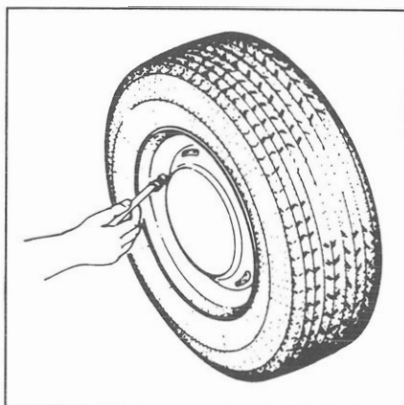
Air Pressure

Checking the air pressure of your tyres (including the spare) ensures your **SAFETY**, as well as reducing fuel consumption and increasing the life of your tyres.

Make sure your vehicle will handle at its best — CHECK THE PRESSURES WEEKLY. For constant long distance of rough road travelling, daily checking is recommended.

Refer to the tyre placard inside the glove box for the correct pressure for your tyres.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. The pressure should be checked when the **TYRES ARE COLD** (stationary for over 3 hours). If they must be checked when warm/hot, allow pressure to read 10% above that recommended.



Always use a **TYRE PRESSURE GAUGE** to check the tyres — simply looking at the tyres is not sufficient.

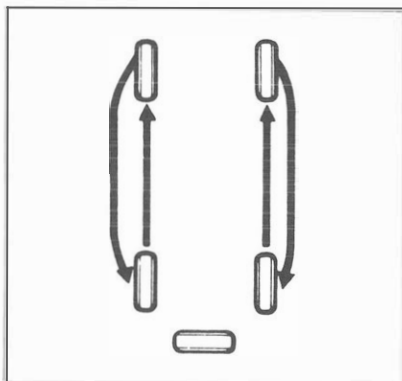
Remember to put back any valve **DUST CAPS** or **EXTENSIONS** if so equipped. This stops dirt and moisture from fouling the valves.

Tyre Rotation

If no abnormal or uneven wear is evident, if you have not experienced any vibration, tyres need not be rotated.

Front tyres are more prone to wear on the shoulder while rear tyres wear more on the crown. Wear can be evened out by rotating the tyres.

Your Holden Dealer will be able to diagnose any unusual signs of wear and can also balance the wheels and tyres for you.



Tyre Replacement

Use only tyres recommended. Don't mix cross ply and radial ply tyres on your vehicle and don't mix radial ply tyres with other types of tyres. New tyres should be fitted in pairs to the front but if replacing only one tyre, pair it with the least worn of the old tyres.

And if you replace all tyres with tyres of a different size, your speedometer readings may be affected. Have the vehicle checked afterwards.

Tyres with a higher speed rating and/or with a maximum load rating in excess of that listed on the tyre placard for tyre size listed are also acceptable as replacements provided they are fitted to a suitable rim size.

Uneven or abnormal tyre wear is usually the result of incorrect inflation pressure, improper wheel alignment, wheels being out of balance, or poor driving habits. The original equipment tyres incorporate built-in tread wear bars which act as indicators to assist in determining when the tyres have worn to the point of needing immediate replacement.

When the wear bars appear, tyre replacement should not be delayed, in the interests of safety.

Tyre Traction

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydro-planing, may cause partial or complete loss of traction, which adversely affects vehicle control and stopping ability. To reduce the possibility of traction loss, the following precautions should be observed:

1. Reduce speed levels during rainstorms or when roads are slushy and if the road has standing water or puddles.
2. Replace tyres when tread wear indicators are visible.
3. Check that tyres are properly inflated for vehicle loading.

Heavy Treads

Caution must be exercised when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions.

At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer.

Any doubts concerning the fitness of the tyres on your vehicle should be referred to your Holden Dealer, who will be pleased to advise.

Tyre Damage and Repair

Tyres with cuts, splits or cracks deep enough to expose the fabric, should be replaced. Bulges also indicate internal damage, and these tyres should also be replaced. Tyres with doubtful damage should be removed from the wheel and examined by a competent person.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it beyond repair.

When puncturing objects are removed, repairs will have to be made according to the recommendations of the tyre manufacturer.

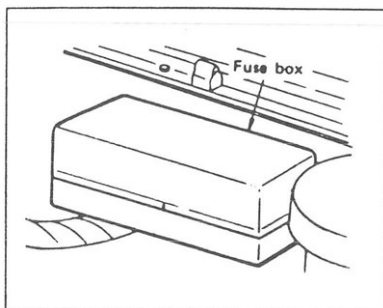
It should always be remembered that a tyre which has been repaired will not be able to be operated safely at the rated maximum speed and due care should be taken.

Replacement Wheels

When replacing wheels for any reason, care should be taken to ensure that the wheels are equivalent to those removed in diameter, rim width and offset.

The fuse box is mounted on the passenger side fender skirt, within the engine compartment. The cover can be pulled away by hand.

If a fuse has been blown out check to locate the cause of trouble and give necessary service attention before replacing the fuse. When replacing the fuse, use a cartridge of the same amperage.



CAUTION: When replacing a fuse be sure to use a fuse of the specified amperage, as indicated on the fuse box cover. Never install a wire or similar for replacement as it may cause a fire hazard to the vehicle.

- If the trouble persists you should contact your nearest Holden Dealer.

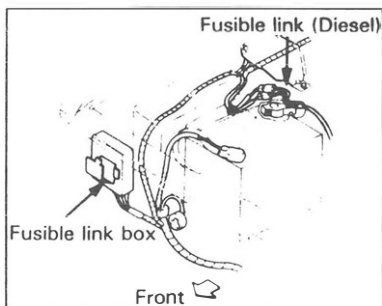
Fusible Link Wires

If there is an overload in the circuits from the battery, the fusible link wires are designed to melt before the entire wiring harness is damaged.

The cause of electrical overload should always be determined before replacing the fusible link wires.

If the headlights or other electrical components do not work and the fuses are O.K., check the fusible link wires.

If a fusible link wire is melted, it must be replaced.

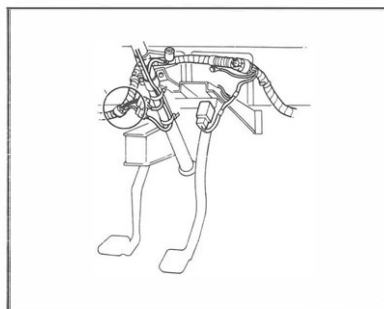


Always use genuine I-GM fusible link wires for replacement.

Never use wire — even for a temporary fix. It may cause extensive damage and possibly a fire.

Rear Window Demister

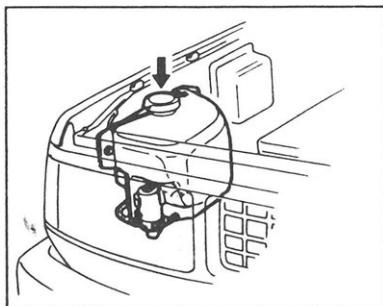
Two fuses (for the rear window demister and, where fitted, a/c) are located under the instrument panel. When replacing the fuse, remove the tape first.



NOTE: Damage to the washer motor may result if a washer button is held depressed when the washer tank is empty. Front and rear washer tanks should be checked and topped if required each week.

Windshield washer tank

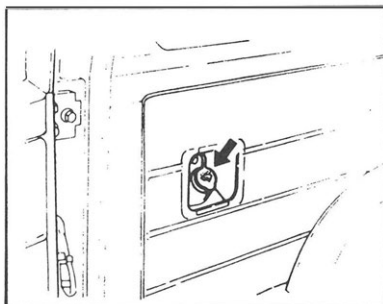
The tank should be filled only with plain water or Optikleen washer solution. (Part No. M37068.) Do not use ordinary soap or detergent as these not only froth up but will also damage the wiper rubbers.



Rear window washer tank

The washer tank is installed in the inside panel at the left rear wheel arch.

The tank should be filled only with plain water or Optikleen.



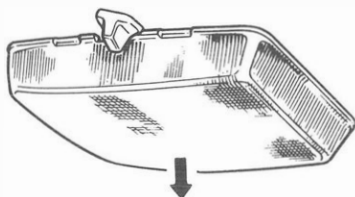
When checking the washer fluid levels, you should also check the aim of the washer onto both the windscreen and the rear glass and the condition of the rubber blade on the wiper arm.

Headlights

Proper aiming of the headlights is most important to assure correct illumination of the highway without blinding other motorists. Headlight aiming or replacement should be carried out by your Holden Dealer.

Dome Lights

The lens can be pulled out easily by hand. The bulb has a capacity of 10W.



Front combination lights

Remove screws retaining the lens and remove the lens. To remove light bulb, push it in and turn counter-clockwise.

Parking lights

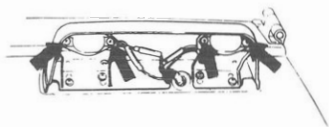
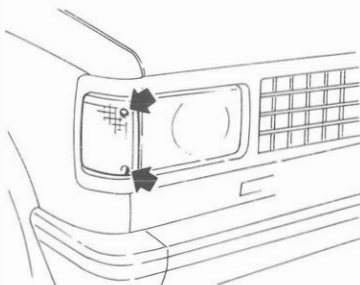
Bulb: 5 watts.

Turn signal lights

Bulb: 21 watts.

Side turn signal lights

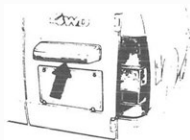
Bulb: 5 watts.



Licence Plate Lights

Remove screws retaining the lens and remove the lens.

The bulb has a capacity of 5W.



Rear Combination Lights

Remove screws retaining the lens and remove the lens.

The bulbs have the following capacities:

Stop/tail lights: 23/8W.

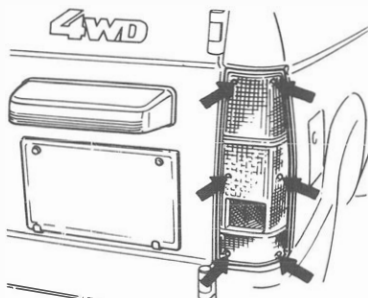
Turn signal lights: 23W.

Back-up lights: 23W.

Side Turn Signal Lights

Unscrew each of the two screws securing the lens.

The bulbs have a capacity of 5 watts



The paint on your Jackaroo will stay bright and new-looking provided you wash and wax it regularly, using approved products. Weekly washing is recommended if the vehicle is being used constantly or if it is not parked under cover.

Before you wash the paintwork, thoroughly wash in and around the front and rear windows and check that door drain holes are clean. Hose off any heavy dirt on the glass, but leave final cleaning of the glass until last.

Underbody Cleaning

The effects of salts and other corrosive materials from road surfaces can result in accelerated rusting and deterioration of underbody components such as brake and fuel lines, frame, underbody floor pan, exhaust system, brackets, parking brake cables. These corrosive effects, however, can be reduced by periodic hosing of the underbody with plain water whenever the vehicle is being washed. In geographical areas having a heavy concentration of corrosive materials it is recommended that the complete underbody be inspected and washed at least once each year, preferably after a winter's exposure. Particular attention should be given to cleaning out underbody members where dirt and other foreign materials may have collected.

Washing Tips

Use either cold or warm water — preferably running.

Use clean chamois cloths, sponges or rags (old, clean linen is better than new material for glass).

Don't wash your vehicle in bright sunlight — it will streak.

Grease and oil can be removed with a little kerosene or white spirits. Flush with water afterwards.

If petrol is spilled during refilling, flush with water immediately.

Be sure that your cleaner, polish or wax is suitable. Holden's Wash & Wax from your Dealer is highly recommended.

Insect spots can be removed with a mixture of 220 grams of baking soda and 2 litres of water. Flush clean afterwards. New tyre look can be restored with Holden's Tyre Black from your Dealer.

Tarnished chrome responds well to Holden's Polishing Liquid.

Wiper Blades — Cleaning

Much of the oil road scum thrown up onto the windshield glass, causing smearing when the wiper is switched on, transfers onto the wiper blade. Many owners, whilst they methodically clean the windshield glass, omit to clean the wiper blades and consequently smearing of the glass re-appears immediately the wiper blades are set in motion. The blades can be cleaned by simply lifting them off the windshield glass and then using warm water and a recognised washing fluid.

IMPORTANT: Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.

Should the wiper blades be frozen to the windshield, it is imperative that they be lifted off and freed by hand before switching on the windshield wiper system.

Specifications & Emissions

Page

- 7-1 — Engine Specifications
- 7-2 — Transmission Specifications
- 7-2 — Rear Axle Specifications
- 7-2 — Steering Specifications
- 7-2 — Brake Specifications
- 7-3 — Wheel Bearing Specifications
- 7-3 — Miscellaneous Lubricants
- 7-3 — Vehicle Dimensions
- 7-3 — Weights (Mass)
- 7-4 — Electrical Specifications
- 7-5 — Identification Plates and Numbers
- 7-7 — Emission Control

Engine	Petrol - 4ZE1	Diesel - 4JB1T
Description	4 cylinder, overhead cam with electronic controlled fuel injection	4 cylinder, Turbo
Piston Displacement	2,559 cc	2,771 cc
Compression Ratio	8.3:1	17.5:1
Power	88 kW @ 5,000 rpm	74 kW @ 3,800 rpm
Torque	195 Nm @ 2,600 rpm	225 Nm @ 2,300 rpm
Firing Order	1, 3, 4, 2	1, 3, 4, 2
Injection Pressure	-	185 kg/cm2
Injection Timing	-	12° BTDC
Bore x Stroke	92.6 x 95	93 x 102
Valve Intake Clearance (cold)	0.20 mm	0.40 mm
Exhaust	0.20 mm	0.40 mm
Oil Capacity (incl. filter)	4.7 litres	4.3 litres
Oil Specifications	SF or SG grade oil. For normal use, 20W/40 viscosity is recommended. If operating in ambient temperatures over 35°C, use 20W/50 viscosity. For prolonged use in snow areas, the use of 15W/40 or 15W/30 is recommended.	CD grade diesel engine oil SAE 30
Coolant Capacity	9.8 litres	10.3 litres
Coolant Specifications	50% water and 50% Long Life Coolant conforming to Holden's specification no. HN 2043, part no. M40236 (1 litre) or M40237 (4 litres).	

PETROL ENGINES ONLY: Engine tune-up data, including spark plug gap, timing and idle speed will be found on the Emission Label, inside the engine compartment of your vehicle. Refer page 7-7 for exact location.

NOTE: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oils, tune-up compounds, friction-reducing compounds and other supplemental additives are NOT RECOMMENDED; their use will not only increase operating costs, but will be detrimental to the operation of your vehicle.

Transmission with transfer case		Manual	Automatic
Transmission Gear Ratios	1st	3.767:1	2.804:1
	2nd	2.314:1	1.532:1
	3rd	1.404:1	1.000:1
	4th	1.000:1	0.705:1
	5th	0.809:1	—
	Rev.	3.873:1	2.394:1
	High	1.000:1	1.000:1
	Low	2.283:1	2.660:1
Transmission oil capacity		2.95 litres	11.4 litres (dry fill) 4.5 litres (service fill)
Transfer oil capacity		1.45 litres	1.1 litres (dry fill) 0.8 litres (service fill)
Transmission oil specification		SAE 15W-40 grade engine oil or same oil as crankcase	Dexron IID* Automatic Transmission Fluid

Brakes	Type	4 wheel disc, incorporating park brake acting on rear wheels.
	Fluid Specification	Hydraulic brake fluid to Holden's 1796 specification
Steering	Type	Power
	Ratio	15.8:1
	Oil Capacity	1.0 litre
	Oil Specification	Dexron II D* Automatic Transmission Fluid
Rear Axle	Type	Spiral bevel pinion and hypoid gear, semi-floating
	Ratio	petrol — 4.555:1 diesel — 4.300:1
	Oil Capacity	1.8 litres
	Oil Specification	LSD GL5 grade oil to Holden's HN1561 specification.
Front Axle	Type	Ductile cast housing and axle tube, fully floating with constant velocity joint.
	Ratio	Petrol — 4.555:1 Diesel — 4.300:1
	Oil Capacity	1.5 litres
	Oil Specification	Gear oil GL5 grade to Holden's HN1386 or HN1187 specification.

* DEXRON II is a registered trademark of General Motor's Corporation.

General Lubricants

Brake & Clutch Pedal Pivots	Grease to Holden's HN1147 Specification
Wheel Bearings	Wheel Bearing Grease to Holden's HN1227 Specification
Chassis, Park Brake, Universal Joint and Propeller Shaft Sliding Yoke	Water resistant EP Type Chassis Lubricant to Holden's HN1271 Specification

Dimensions

Wheel Base	Long Short	2650 mm 2300 mm
Wheel Track	Front Rear	1390 mm 1400 mm
Minimum Ground Clearance	Manual Automatic	165 mm 190 mm
Turning Radius (Kerb to Kerb)	Long Short	5.4 m 4.8 m

Weight (Kg)

Model		UBS 17 Petrol	UBS 55 Diesel
Kerb Weight		L.W.B. – manual 1630 – auto 1660 S.W.B. 1540	1720
Permissible G.V.M.		2150	2150
G.C.M.	Trailer without Independent Controlled Brakes	2650	2650
	Trailer with Independent Controlled Brakes	3100	3100
Rear Axle Capacity		1600	1600
Front Axle Capacity		1150	1150

Kerb weight represents a standard, unloaded vehicle without options, but with 10 litres of fuel. Refer page 3-10 for general loading and towing information.

Bulbs

	Wattage		Wattage
Headlight (Halogen)	60/55	Rear Turn Signal Lights	23
		Back Up Light	23
Parking Lamp	5	Licence Plate Lights	5
Turn Signal Lights	21	Dome Light	10
Side Turn Lights	5	Tail/Stop Light	5/23

Refer page 6-12 when replacing bulbs.

Battery — 12 volt system with negative polarity ground

Diesel: Nx 120-7-MF, 80 amp hours.

Petrol: 55D23R, 60 amp hours.

Fuses

The fuse junction box is installed in the left fender skirt in the engine compartment. Always use the same fuse rating (as indicated on the fuse box cover) when replacing fuses. Refer page 6-10 for further details.

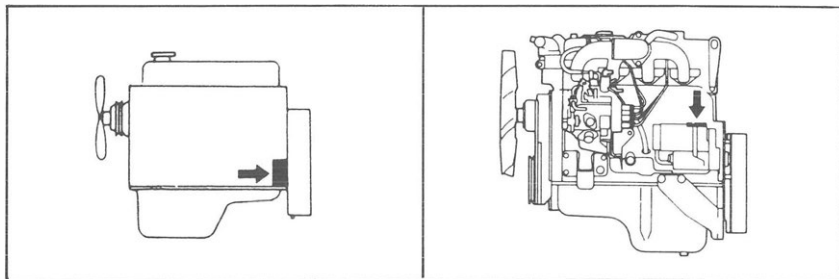
Engine number location:

Petrol

It is stamped on the right front side of the cylinder body.

Diesel

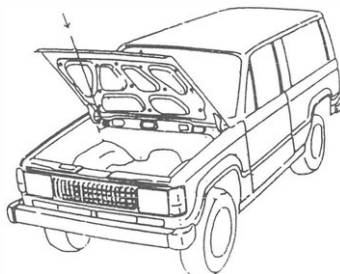
It is stamped on the left front side of the cylinder body.



Body and Option Identification Plate:

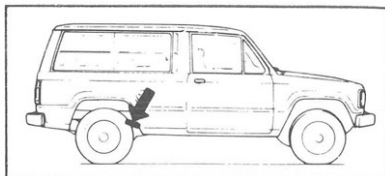
The plate shows body style, body serial number, paint and trim colour combination, paint number, engine transmissions, axle ratio options and built date.

The built date is defined as "the date of manufacture" by calendar month and year in which the body shell and power train sub-assemblies are co-joined and the vehicle is driven or moved from the production line.



V.I.N. — Frame

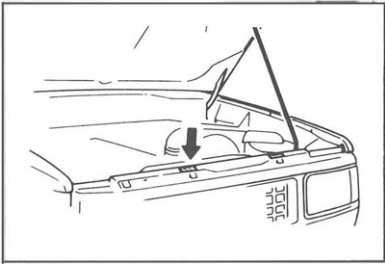
It is stamped on the side of the chassis member in the position shown below.



V.I.N. Plate:

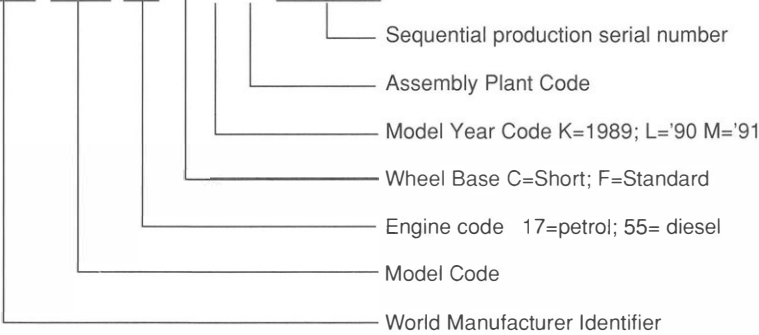
Vehicle identification plate:

It is attached to the upper face of the radiator sill in the engine compartment.



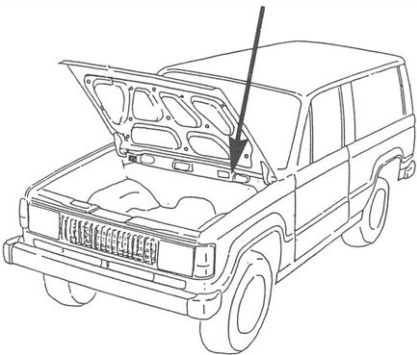
Vehicle Identification Number (I.S.O.V.I.N.)

JAC UBS 55 F M 7 123456



Safety Compliance Plate:

Shown on this plate are the Approval numbers, Category, Manufacturer's Name, Model name and Model code, G.V.M. (Gross Vehicle Mass), Seating Capacity, Build date and V.I.N. (Vehicle Identification Number).



Tyre Pressure Placard:

Inside the glovebox lid.

Emission Label:

Refer following page.

During the combustion process in an automotive engine, some of the fuel (hydrocarbons) fails to burn and is discharged into the engine crankcase or exhaust system. Additionally hydrocarbons are emitted into the atmosphere through evaporation of petrol vapours from the fuel tank and carburettor. Of the total hydrocarbons coming from uncontrolled automobiles, about 25% are emitted from the crankcase, 20% from the fuel system and 55% from the engine exhaust.

In addition to hydrocarbons, carbon monoxide and oxides of nitrogen are also formed during the combustion process. These are also discharged into the exhaust system.

There are three areas from which pollutants are emitted:

- (a) Exhaust System
- (b) Crankcase
- (c) Fuel System.

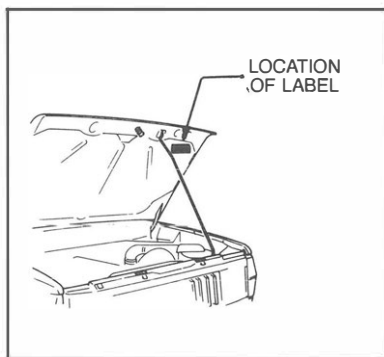
A number of controls have been installed by I-GM to control the amount of pollutants emitted from your new vehicle.

It is recommended that any replacement parts used for required maintenance services or for the repair of emission control systems be new parts. Use of replacement parts which are not of equivalent quality may impair the effectiveness of such systems, and may adversely affect your vehicle Warranty.

Vehicle Emission Control Information Label

The label is located on the inside of the bonnet.

Information on this label includes ignition timing, idle speed and spark plug gap settings.



Service/Maintenance Schedule

Page

- 8-1 — When to have the Services Carried Out
- 8-2 — Extreme Operating Conditions
- 8-3 — Maintenance Schedule
 - What is Actually Performed at Each Service
- 8-5 — Suggested Times for Each Service
- 8-6 — 1,000 Km Inspection and Adjustment
- 8-8 — Intermediate Oil Change Record
- 8-10 — 10,000 Km or 6 Months Service
- 8-12 — 20,000 Km or 12 Months Service
- 8-14 — 30,000 Km or 18 Months Service
- 8-16 — 40,000 Km or 24 Months Service
- 8-18 — 50,000 Km or 30 Months Service
- 8-20 — 60,000 Km or 36 Months Service
- 8-22 — 70,000 Km or 42 Months Service
- 8-24 — 80,000 Km or 48 Months Service
- 8-26 — 90,000 Km or 54 Months Service
- 8-28 — 100,000 Km or 60 Months Service
- 8-30 — 110,000 Km or 66 Months Service
- 8-32 — 120,000 Km or 72 Months Service
- 8-34 — Notice of Name/Address Ownership Change

When it comes to service, remember that your Holden Dealer has the trained personnel and specialised equipment to correctly service your vehicle. Your dealer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your Jackaroo cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians.

Therefore, it is in the owner's interest that the following services are performed at the specified Distance or Months (whichever occurs first).

- 1,000 km — 1 Month
- 10,000 km — 6 Months
- 20,000 km — 12 Months
- 30,000 km — 18 Months
- 40,000 km — 24 Months
- 50,000 km — 30 Months
- 60,000 km — 36 Months
- 70,000 km — 42 Months
- 80,000 km — 48 Months
- 90,000 km — 54 Months
- 100,000 km — 60 Months
- 110,000 km — 66 Months
- 120,000 km — 72 Months

The one month — 1,000 kilometres service will be performed without cost for labour by the Selling Dealer.

This service may be carried out by another Holden Dealer provided you have a letter of introduction from the Selling Dealer. Your Dealer will supply the necessary letter of introduction upon request.

It is the owner's responsibility to have the engine oil changed between the regular service interval of 10,000 km or 6 months, refer page 8-8.

The services shown in this schedule between 1,000 and 120,000 are to be performed after 120,000 km at the same intervals.

NOTE: All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the new vehicle warranty to be rectification of defects in material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake etc. or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.

Failure to have proper maintenance services carried out by an Authorised Holden Dealer or service Dealer may void your new vehicle warranty.

It is strongly recommended that you read the "New Vehicle Warranty" on page 5-1, so that you are conversant with your entitlements.

As each service is performed and the coupon removed, the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should see that the Validation Record is stamped and signed by the Dealer. This is important as it will not only assist in the determination of Warranty Claims, but enhance the value of the vehicle whenever resale is contemplated.

If your vehicle operates under any of the extreme conditions listed in the following table it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Plan.

NOTE: The extra services listed below need only be used continuously if your vehicle operates continuously under the conditions specified.

If you operate under any of these conditions on a one off basis e.g. holiday trip, then an extra service should be for that period only.

As a guide, if you operate continually for a period of one month or 1,000 kilometres under any of the extreme conditions, then this could qualify for additional services.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your Holden Dealer.

	Repeated short trips	Driving on rough roads	Driving on dusty roads	Driving in extremely cold weather and/or salted roads	Towing
Change engine oil every 2,500 km	X			X	X
Replace engine oil filter every 5,000 km	X			X	X
Inspect universal joints and sleeve for wear every 10,000 km			X		
Change manual transmission and transfer case oil every 20,000 km			X		X
Change automatic transmission and transfer case oil every 30,000 km	X	X	X		X
Change differential oil every 20,000 km	X	X	X		
Change air cleaner element every 5,000 km				X	

Use odometer reading or months, whichever occurs first	X 1000	1	10	20	30	40	50	60	70	80	90	100	110	120
	or months		6	12	18	24	30	36	42	48	54	60	66	72

Under Hood Operations

Change engine oil (every 5,000 km).	X	X	X	X	X	X	X	X	X	X	X	X	X
Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.	X	X	X	X	X	X	X	X	X	X	X	X	X
P - check timing belt for cracks, wear and tension.		X	X	X	X	X	X	X	X	X	X	X	X
Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.		X	X	X	X	X	X	X	X	X	X	X	X
Inspect air cleaner element for restriction and condition. Replace if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X
D - Check injection pressure and spraying condition.					X					X			
D - Check injection timing.		X		X		X		X		X		X	
P - Lubricate distributor and clean cap Check high tension leads. Replace spark plugs. Check ignition timing.			X		X		X		X		X		X
P - EGR System only. Clean valve and manifold opening.			X		X		X		X		X		X
Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.					X		X		X		X		X
Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.			X		X		X		X		X		X
P - Check tightness of cylinder head bolts.	X		X		X		X		X		X		X
Adjust valve clearance.	X		X		X		X		X		X		X
Check and adjust if necessary engine idle speed.			X		X		X		X		X		X
P - Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage.					X		X		X		X		X
Check wiring harness and terminals for looseness or damage.	X	X	X	X	X	X	X	X	X	X	X	X	X
Replace fuel filter.			X		X		X		X		X		X

Use odometer reading or months, whichever occurs first	X 1000 km													
	1	10	20	30	40	50	60	70	80	90	100	110	120	
or months		6	12	18	24	30	36	42	48	54	60	66	72	

Under Vehicle Operations

P—Change engine oil filter.	X	X	X	X	X	X	X	X	X	X	X	X	X
D—Change engine oil filter.		X	X	X	X	X	X	X	X	X	X	X	X
Check manual transmission oil level.		X	X	X		X	X	X		X	X	X	
Change lubrication in manual transmission and transfer box.	X				X				X				X
Check front and rear axle oil levels.			X	X		X	X	X		X	X	X	
Change front and rear axle oils.		X			X				X				X
Lubricate front suspension and steering joints. Inspect for looseness and damage.	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.	X	X	X	X	X	X	X	X	X	X	X	X	X
Lubricate accelerator, transmission shift and clutch linkages as applicable.		X	X	X	X	X	X	X	X	X	X	X	X
Check parking brake operation and lubricate system. Adjust if necessary.		X	X	X	X	X	X	X	X	X	X	X	X
Inspect exhaust system and adjacent body areas for open seams or damage.		X	X	X	X	X	X	X	X	X	X	X	X
Inspect engine and transmission mountings.		X	X	X	X	X	X	X	X	X	X	X	X
Check and adjust clutch fork operating rod free travel.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check operation of transmission shift linkage. Adjust if necessary.			X		X		X		X		X		X
Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect disc brake pads for wear (front and rear).			X		X		X		X		X		X
Inspect front wheel bearings and check adjustment. Repack only if necessary.			X				X				X		
Repack front wheel bearings.					X				X				X
Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check under vehicle for damage or component looseness.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check propeller shaft U-joints and splines for wear.			X		X		X		X		X		X
Change power steering fluid.					X				X				X
Change brake fluid.					X				X				X

Use odometer reading or months, whichever occurs first	X 1000 km													
	1	10	20	30	40	50	60	70	80	90	100	110	120	
or months	6	12	18	24	30	36	42	48	54	60	66	72		

Interior Vehicle Operations

Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.	X	X	X	X	X	X	X	X	X	X	X	X	X
Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check steering wheel free play.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check brake pedal travel and free play.	X	X	X	X	X	X	X	X	X	X	X	X	X

Exterior Vehicle Operations

Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.	X	X	X	X	X	X	X	X	X	X	X	X	X
Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.	X	X	X	X	X	X	X	X	X	X	X	X	X

SUGGESTED LABOUR TIME — HOURS	—	1.3	2.5	1.2	3.9	1.2	2.5	1.2	3.9	1.2	2.5	1.2	3.9
Add if front wheel bearings repacked.	—	—	.5	—	—	—	.5	—	—	—	.5	—	—
Add for diesel engine.	—	.5	—	.5	—	1.6	—	.5	—	.5	—	.5	—
Subtract for diesel engine	—	—	.5	—	.6	—	.6	—	.6	—	—	—	.6

The owner will be charged for all lubricants and materials used plus labour at the times recommended above.

The repairing or replacing of any part found faulty during a service check and not covered by I-GM Warranty will be added to the charges.

Where any deficiencies are noted, such items should be reported to the owner/operator so that the extra work required can be authorised.

1000 Kilometre Inspection and Adjustment

8-6



This coupon should not be removed until the vehicle is presented for service.

Owner's Name Mr. _____
Mrs. _____
Miss _____

Address _____

Town & State _____ Postcode _____

Reg. No. _____ Model Name _____

V.I.N. _____ Eng. No. _____

Selling Dealer's Stamp & Signature _____

Date of Acquisition _____

This vehicle has been thoroughly checked in accordance with the schedule on the reverse side of this coupon.

Servicing Dealer's Stamp & Signature _____

Servicing Dealer _____

Town _____ State _____

Owner's Signature _____

This Inspection & Adjustment will be carried out without charge to the owner except for any lubricants or filters used.

This vehicle has been thoroughly checked in accordance with the 1,000 kilometre inspection and adjustment.

**1000 Kilometre
Inspection and Adjustment**

Dealer
Service Manager's Signature
Date Odometer Reading

Under Hood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
P	Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change lubrication in manual transmission and transfer box.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

INTERMEDIATE OIL CHANGES**8-8**

5,000 km or 3 Months Oil and (P) Oil Filter Change	Intermediate oil and (P) oil filter change carried out at km on (date) Servicing Dealer
15,000 km or 9 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
25,000 km or 15 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
35,000 km or 21 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
45,000 km or 27 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
55,000 km or 33 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
65,000 km or 39 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
75,000 km or 45 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
85,000 km or 51 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
95,000 km or 57 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
105,000 km or 63 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer
115,000 km or 69 Months Oil Change	Intermediate oil change carried out at km on (date) Servicing Dealer

10,000 km or 6 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:
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10,000 km or 6 Months Service Coupon

8-10



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.3 hrs to perform (add .5 hrs for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Change front and rear axle oils.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

20,000 km or 12 Months SERVICE VALIDATION

Servicing Dealer

Date of Service

Odometer

Signed

Additional Services Performed:

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20,000 km or 12 Months Service Coupon

8-12



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.5 hrs to perform.
(Subtract 0.5 hrs for diesel)
(add 0.5 if wheel bearings repacked)

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	Check wiring harness and terminals for looseness or damage.
	Replace fuel filter.

PTO

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

30,000 km or 18 Month SERVICE VALIDATION

Servicing Dealer
 Date of Service
 Odometer
 Signed

Additional Services Performed:

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30,000 km or 18 Months Service Coupon

8-14



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.2 hrs to perform (add .5 hr for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

40,000 km or 24 Month SERVICE VALIDATION

Servicing Dealer

Date of Service

Odometer

Signed

Additional Services Performed:

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40,000 km or 24 Months Service Coupon

8-16



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 3.9 hrs to perform.
(Subtract 0.6 hrs for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.
	Replace fuel filter
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	P - Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage.
	Check wiring harness and terminals for looseness or damage.

PTO

Under Vehicle Operations

	Change engine oil filter.
	Change lubrication in manual transmission and transfer box.
	Change front and rear axle oils.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Repack front wheel bearings.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.
	Change power steering fluid.
	Change brake fluid.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

50,000 km or 30 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:

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50,000 km or 30 Months Service Coupon

8-18



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.2 hrs to perform (add 1.6 hrs for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection pressure and spraying condition.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

60,000 km or 36 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:
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60,000 km or 36 Months Service Coupon

8-20



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.5 hrs to perform.
(Subtract .6 hr for diesel engine).
(Add 0.5 if wheel bearings repacked)

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.
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Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	Check wiring harness and terminals for looseness or damage.
	Replace fuel filter.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

70,000 km or 42 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:
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70,000 km or 42 Months Service Coupon

8-22



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.2 hrs to perform (add .5 hrs for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

80,000 km or 48 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:

80,000 km or 48 Months Service Coupon

8-24



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 3.9 hrs to perform (Subtract 0.6 hrs for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

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Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	P - Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as will as condition. Remove canister and check for cracks or damage.
	Check wiring harness and terminals for looseness or damage.
	Replace fuel filter.

Under Vehicle Operations

	Change engine oil filter.
	Change lubrication in manual transmission and transfer box.
	Change front and rear axle oils.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Repack front wheel bearings.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.
	Change power steering fluid.
	Change brake fluid.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

90,000 km or 54 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:

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90,000 km or 54 Months Service Coupon

8-26



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.2 hrs to perform (add .5 hr for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

.....
.....

Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

100,000 km or 60 Month SERVICE VALIDATION

Servicing Dealer

Date of Service

Odometer

Signed

Additional Services Performed:

100,000 km or 60 Months Service Coupon

8-28



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.5 hrs to perform.

(add .5 if wheel bearings repacked).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

.....
.....

Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	D - Check injection pressure and spraying condition.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	Check wiring harness and terminals for looseness or damage.
	Replace fuel filter.

PTO

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

110,000 km or 66 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:
.....
.....
.....

110,000 km or 66 Months Service Coupon

8-30



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.2 hrs to perform.
(Add .5 hr for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.

.....
.....

Signature Date

Underhood Operations

	Change engine oil (every 5,000).
	Check all fluid levels in engine compartment, incl. brake, coolant, washer, clutch, battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor % with tester.
	Inspect condition and tension of all engine drive belts. Adjust if necessary using gauge.
P	Check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
D	Check injection timing.
	Check wiring harness and terminals for looseness or damage.

Under Vehicle Operations

	Change engine oil filter.
	Check manual transmission oil level.
	Check front and rear axle oil levels.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

120,000 km or 72 Month SERVICE VALIDATION

Servicing Dealer
Date of Service
Odometer
Signed

Additional Services Performed:
.....
.....
.....

120,000 km or 72 Months Service Coupon

8-32



I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 3.9 hrs to perform.

(Subtract .6 for diesel engine).

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested.
.....
.....

Signature Date

Under Hood Operations

	Change engine oil (every 5,000 km).
	Check all fluid levels in engine compartment, inc brake, washer, clutch battery electrolyte, auto transmission, power steering. Check coolant level and inhibitor %, use tester.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	P - check timing belt for cracks, wear and tension.
	Inspect condition and attachment of all hoses in engine compartment. Inspect for fluid leaks, e.g. oil, brake, coolant, fuel, clutch.
	Inspect air cleaner element for restriction and condition. Replace if necessary.
	P - Lubricate distributor and clean cap. Check high tension leads. Replace spark plugs. Check ignition timing.
	P - EGR System only. Clean valve and manifold opening. Replace if necessary.
	Serviceable PCV Valves - Dismantle, clean and reassemble. Disposable PCV Valves - Test and replace if necessary.
	Drain and refill cooling system. Add specified quantity of anti-freeze. Pressure test cooling system and check for leaks. Clean radiator core - check for blockages.
	P - Check tightness of cylinder head bolts.
	Adjust valve clearance.
	Check and adjust if necessary engine idle speed.
	P - Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage.
	Check wiring harness and terminals for looseness or damage.
	Replace fuel filter.

PTO

Under Vehicle Operations

	Change engine oil filter.
	Change lubrication in manual transmission and transfer box.
	Change front and rear axle oils.
	Lubricate front suspension and steering joints. Inspect for looseness and damage.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage.
	Inspect engine and transmission mountings.
	Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres and wheels for irregular wear and damage. Check inflation pressure and torque wheel nuts.
	Inspect disc brake pads for wear (front and rear).
	Repack front wheel bearings.
	Check under vehicle for fluid leaks, incl. brakes, fuel, clutch, transmission, shock absorbers and differential.
	Check under vehicle for damage or component looseness.
	Check propeller shaft U joints and splines for wear.
	Change power steering fluid.
	Change brake fluid.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle condition and retractor mechanism function.
	Check steering wheel free play.
	Check brake pedal travel and free play.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and transmission shift pattern. Check wiper blade effectiveness.

To ensure continued interest in your vehicle, Holden's requests that owners who change their name or address and subsequent owners who purchase the vehicle fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.

Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☒ APPROPRIATE SQUARE

Owner's Mr. _____
Name Miss _____

Address _____

Town _____

State _____ Post Code _____

Registration No. _____

Vehicle Identification
Number (I.S.O.V.I.N.) _____

(Refer Specifications Section of this Manual for location of I.S.O.V.I.N.)



Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☒ APPROPRIATE SQUARE

Owner's Mr. _____
Name Miss _____

Address _____

Town _____

State _____ Post Code _____

Registration No. _____

Vehicle Identification
Number (I.S.O.V.I.N.) _____

(Refer Specifications Section of this Manual for location of I.S.O.V.I.N.)

Place in an envelope and mail to:

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
Melbourne,
Victoria, 3001

Place in an envelope and mail to:

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
Melbourne,
Victoria, 3001

To ensure continued interest in your vehicle, Holder's requests that owners who change their name or address and subsequent owners who purchase the vehicle fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.

Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☒ APPROPRIATE SQUARE

Mr.
Owner's Mrs.
Name Miss

Address

Town

State Post Code

Registration No.

Vehicle Identification
Number (I.S.O.V.I.N.)

(Refer Specifications Section of this Manual for location of I.S.O.V.I.N.)



Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☒ APPROPRIATE SQUARE

Mr.
Owner's Mrs.
Name Miss

Address

Town

State Post Code

Registration No.

Vehicle Identification
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Holden's Motor Company,
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Melbourne,
Victoria, 3001

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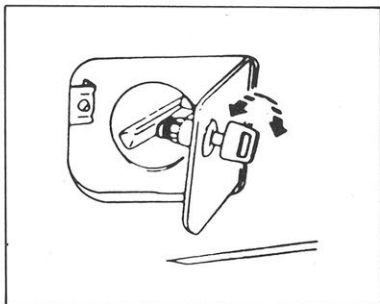
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Fuel

The vehicle is equipped with lockable fuel filler door which can be unlocked with starter key.

After refuelling, check to be sure the fuel filler door is locked up properly.

Fuel Tank Capacity = approx. 83 litres.



Overfilling of the fuel tank can affect the evaporative Emission Control System.

To avoid this, the following recommendations are made for both diesel and petrol engines:

1. Fuel tanks should always be filled at the intermediate or fast fill rate. After initial shut-off (or vent blow-back) no further fuel should be added. This retains the tank's ability to accommodate fuel expansion.
2. It is permissible to "trickle fill" fuel tanks where vehicles are to be driven for a distance of at least 50 km shortly after the tank is filled.

Petrol Engines

CAUTION: Petrol is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refuelling. If petrol fumes are noticed while driving, the cause should be determined and corrected, without delay.

To reduce the exhaust pollutants in the atmosphere, your Jackaroo has been designed to operate on a good clean UNLEADED FUEL of at least 91 octane rating (Research Octane Number), as indicated by the label on the fuel cap.

To ensure that the correct fuel is used, your Jackaroo has been fitted with a fuel filler nozzle restrictor. This allows the thinner, unleaded fuel filler nozzle to open the hinged flap, so that fuel may be added to the fuel tank. The leaded fuel filler nozzle is wider and therefore cannot open the flap.

Diesel Engines

Use a good quality diesel fuel of at least 47 cetane rating.